SAFETY DATA SHEET
PathDetect cJun trans Reporting System, Part Number 219000

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

1.1 Product identifier
Product name : PathDetect cJun trans Reporting System, Part Number 219000
Part No. (Kit) : 219000
Part No. : pFR-Luc Plasmid 219050-51
(Reporter Plasmid)
pFA2-cJun Plasmid 219052-51
pFC2-dbd 219055-51
pFC-MEKK Plasmid 219058-51
(Positive Control)

1.2 Relevant identified uses of the substance or mixture and uses advised against
<table>
<thead>
<tr>
<th>Identified uses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Analytical reagent.</td>
<td></td>
</tr>
<tr>
<td>pFR-Luc Plasmid (Reporter Plasmid)</td>
<td>0.05 ml (50 µg 1 µg/µl)</td>
</tr>
<tr>
<td>pFA2-cJun Plasmid</td>
<td>0.2 ml</td>
</tr>
<tr>
<td>pFC2-dbd</td>
<td>0.08 ml (2 µg 25 ng/µl)</td>
</tr>
<tr>
<td>pFC-MEKK Plasmid (Positive Control)</td>
<td>0.2 ml (5 µg 25 ng/µl)</td>
</tr>
</tbody>
</table>

1.3 Details of the supplier of the safety data sheet
Agilent Technologies Manufacturing GmbH & Co. KG
Hewlett-Packard-Str. 8
76337 Waldbronn
Germany
0800 603 1000
e-mail address of person responsible for this SDS : pdl-msds_author@agilent.com

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

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Product definition : pFR-Luc Plasmid (Reporter Plasmid) Mixture
pFA2-cJun Plasmid Mixture
pFC2-dbd Mixture
pFC-MEKK Plasmid (Positive Control) Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]
Not classified.

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

2.2 Label elements
Date of issue/Date of revision : 31/12/2017
SECTION 2: Hazards identification

**Signal word**
- pFR-Luc Plasmid (Reporter Plasmid) - No signal word.
- pFA2-cJun Plasmid - No signal word.
- pFC2-dbd - No signal word.
- pFC-MEKK Plasmid (Positive Control) - No signal word.

**Hazard statements**
- pFR-Luc Plasmid (Reporter Plasmid) - No known significant effects or critical hazards.
- pFA2-cJun Plasmid - No known significant effects or critical hazards.
- pFC2-dbd - No known significant effects or critical hazards.
- pFC-MEKK Plasmid (Positive Control) - No known significant effects or critical hazards.

**Precautionary statements**

**Prevention**
- pFR-Luc Plasmid (Reporter Plasmid) - Not applicable.
- pFA2-cJun Plasmid - Not applicable.
- pFC2-dbd - Not applicable.
- pFC-MEKK Plasmid (Positive Control) - Not applicable.

**Response**
- pFR-Luc Plasmid (Reporter Plasmid) - Not applicable.
- pFA2-cJun Plasmid - Not applicable.
- pFC2-dbd - Not applicable.
- pFC-MEKK Plasmid (Positive Control) - Not applicable.

**Storage**
- pFR-Luc Plasmid (Reporter Plasmid) - Not applicable.
- pFA2-cJun Plasmid - Not applicable.
- pFC2-dbd - Not applicable.
- pFC-MEKK Plasmid (Positive Control) - Not applicable.

**Disposal**
- pFR-Luc Plasmid (Reporter Plasmid) - Not applicable.
- pFA2-cJun Plasmid - Not applicable.
- pFC2-dbd - Not applicable.
- pFC-MEKK Plasmid (Positive Control) - Not applicable.

**Supplemental label elements**
- pFR-Luc Plasmid (Reporter Plasmid) - Not applicable.
- pFA2-cJun Plasmid - Not applicable.
- pFC2-dbd - Not applicable.
- pFC-MEKK Plasmid (Positive Control) - Not applicable.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles**
- pFR-Luc Plasmid (Reporter Plasmid) - Not applicable.
- pFA2-cJun Plasmid - Not applicable.
- pFC2-dbd - Not applicable.
- pFC-MEKK Plasmid (Positive Control) - Not applicable.

**Special packaging requirements**
- Tactile warning of danger - Not applicable.

2.3 Other hazards

Date of issue/Date of revision: 31/12/2017
PathDetect cJun trans Reporting System, Part Number 219000

SECTION 2: Hazards identification

Other hazards which do not result in classification:
- pFA2-cJun Plasmid: None known.
- pFC2-dbdb: None known.
- pFC-MEKK Plasmid (Positive Control): None known.

SECTION 3: Composition/information on ingredients

3.1 Substances:
- pFR-Luc Plasmid (Reporter Plasmid): Mixture
- pFA2-cJun Plasmid: Mixture
- pFC2-dbdb: Mixture
- pFC-MEKK Plasmid (Positive Control): Mixture

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type:
- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [5] Substance of equivalent concern
- [6] Additional disclosure due to company policy

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

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact:
- pFR-Luc Plasmid (Reporter Plasmid): 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.
- pFA2-cJun Plasmid: 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.
- pFC2-dbdb: 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.
- pFC-MEKK Plasmid (Positive Control): Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Inhalation:
- pFR-Luc Plasmid (Reporter Plasmid): Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- pFA2-cJun Plasmid: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- pFC2-dbdb: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- pFC-MEKK Plasmid (Positive Control): Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Skin contact:
- pFR-Luc Plasmid (Reporter Plasmid): Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- pFA2-cJun Plasmid: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- pFC2-dbdb: Flush contaminated skin with plenty of water. Remove

Date of issue/Date of revision: 3/19/2017
SECTION 4: First aid measures

**Ingestion**

- **pFR-Luc Plasmid (Reporter Plasmid)**
  - 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.

- **pFA2-cJun Plasmid**
  - 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.

- **pFC2-dbd**
  - 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.

- **pFC-MEKK Plasmid (Positive Control)**
  - 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.

**Protection of first-aiders**

- **pFR-Luc Plasmid (Reporter Plasmid)**
  - No action shall be taken involving any personal risk or without suitable training.

- **pFA2-cJun Plasmid**
  - No action shall be taken involving any personal risk or without suitable training.

- **pFC2-dbd**
  - No action shall be taken involving any personal risk or without suitable training.

- **pFC-MEKK Plasmid (Positive Control)**
  - No action shall be taken involving any personal risk or without suitable training.

4.2 Most important symptoms and effects, both acute and delayed

**Potential acute health effects**

**Eye contact**

- **pFR-Luc Plasmid (Reporter Plasmid)**
  - No known significant effects or critical hazards.

- **pFA2-cJun Plasmid**
  - No known significant effects or critical hazards.

- **pFC2-dbd**
  - No known significant effects or critical hazards.

- **pFC-MEKK Plasmid (Positive Control)**
  - No known significant effects or critical hazards.

**Inhalation**

- **pFR-Luc Plasmid (Reporter Plasmid)**
  - No known significant effects or critical hazards.

- **pFA2-cJun Plasmid**
  - No known significant effects or critical hazards.

- **pFC2-dbd**
  - No known significant effects or critical hazards.

- **pFC-MEKK Plasmid (Positive Control)**
  - No known significant effects or critical hazards.

**Skin contact**

- **pFR-Luc Plasmid (Reporter Plasmid)**
  - No known significant effects or critical hazards.

- **pFA2-cJun Plasmid**
  - No known significant effects or critical hazards.

- **pFC2-dbd**
  - No known significant effects or critical hazards.

- **pFC-MEKK Plasmid (Positive Control)**
  - No known significant effects or critical hazards.
SECTION 4: First aid measures

Ingestion:
- **pFR-Luc Plasmid (Reporter Plasmid)**: No known significant effects or critical hazards.
- **pFA2-cJun Plasmid**: No known significant effects or critical hazards.
- **pFC2-dbd**: No known significant effects or critical hazards.
- **pFC-MEKK Plasmid (Positive Control)**: No known significant effects or critical hazards.

Over-exposure signs/symptoms:

**Eye contact**:
- **pFR-Luc Plasmid (Reporter Plasmid)**: No specific data.
- **pFA2-cJun Plasmid**: No specific data.
- **pFC2-dbd**: No specific data.
- **pFC-MEKK Plasmid (Positive Control)**: No specific data.

**Inhalation**:
- **pFR-Luc Plasmid (Reporter Plasmid)**: No specific data.
- **pFA2-cJun Plasmid**: No specific data.
- **pFC2-dbd**: No specific data.
- **pFC-MEKK Plasmid (Positive Control)**: No specific data.

**Skin contact**:
- **pFR-Luc Plasmid (Reporter Plasmid)**: No specific data.
- **pFA2-cJun Plasmid**: No specific data.
- **pFC2-dbd**: No specific data.
- **pFC-MEKK Plasmid (Positive Control)**: No specific data.

**Ingestion**:
- **pFR-Luc Plasmid (Reporter Plasmid)**: No specific data.
- **pFA2-cJun Plasmid**: No specific data.
- **pFC2-dbd**: No specific data.
- **pFC-MEKK Plasmid (Positive Control)**: No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

**Notes to physician**:
- **pFR-Luc Plasmid (Reporter Plasmid)**: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- **pFA2-cJun Plasmid**: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- **pFC2-dbd**: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- **pFC-MEKK Plasmid (Positive Control)**: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments**:
- **pFR-Luc Plasmid (Reporter Plasmid)**: No specific treatment.
- **pFA2-cJun Plasmid**: No specific treatment.
- **pFC2-dbd**: No specific treatment.
- **pFC-MEKK Plasmid (Positive Control)**: No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

**Suitable extinguishing media**:
- **pFR-Luc Plasmid (Reporter Plasmid)**: Use an extinguishing agent suitable for the surrounding fire.
- **pFA2-cJun Plasmid**: Use an extinguishing agent suitable for the surrounding fire.
- **pFC2-dbd**: Use an extinguishing agent suitable for the surrounding fire.
- **pFC-MEKK Plasmid (Positive Control)**: Use an extinguishing agent suitable for the surrounding fire.
SECTION 5: Firefighting measures

Unsuitable extinguishing media:
- pFA2-c-Jun Plasmid: None known.
- pFC2-dbd: None known.
- pFC-MEKK Plasmid (Positive Control): None known.

5.2 Special hazards arising from the substance or mixture

Hazard from the substance or mixture:
- pFR-Luc Plasmid (Reporter Plasmid): In a fire or if heated, a pressure increase will occur and the container may burst.
- pFA2-c-Jun Plasmid: In a fire or if heated, a pressure increase will occur and the container may burst.
- pFC2-dbd: In a fire or if heated, a pressure increase will occur and the container may burst.
- pFC-MEKK Plasmid (Positive Control): In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous combustion products:
- pFR-Luc Plasmid (Reporter Plasmid): No specific data.
- pFA2-c-Jun Plasmid: No specific data.
- pFC2-dbd: No specific data.
- pFC-MEKK Plasmid (Positive Control): No specific data.

5.3 Advice for firefighters

Special precautions for fire-fighters:
- pFR-Luc Plasmid (Reporter Plasmid): 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.
- pFA2-c-Jun Plasmid: 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.
- pFC2-dbd: 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.
- pFC-MEKK Plasmid (Positive Control): 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:
- pFR-Luc Plasmid (Reporter Plasmid): Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
- pFA2-c-Jun Plasmid: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
- pFC2-dbd: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
- pFC-MEKK Plasmid (Positive Control): Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
SECTION 5: Firefighting measures

basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:

<table>
<thead>
<tr>
<th>Plasmid Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>pFR-Luc Plasmid (Reporter Plasmid)</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>pFA2-cJun Plasmid</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>pFC2-dbd</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>pFC-MEKK Plasmid (Positive Control)</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>
</tbody>
</table>

For emergency responders:

<table>
<thead>
<tr>
<th>Plasmid Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>pFR-Luc Plasmid (Reporter Plasmid)</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>pFA2-cJun Plasmid</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>pFC2-dbd</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>pFC-MEKK Plasmid (Positive Control)</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>

6.2 Environmental precautions:

<table>
<thead>
<tr>
<th>Plasmid Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>pFR-Luc Plasmid (Reporter Plasmid)</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>pFA2-cJun Plasmid</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>pFC2-dbd</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>pFC-MEKK Plasmid (Positive Control)</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>

6.3 Methods and material for containment and cleaning up

Date of issue/Date of revision: 31/12/2017
SECTION 6: Accidental release measures

**Methods for cleaning up**

<table>
<thead>
<tr>
<th>Plasmid Type</th>
<th>Cleaning Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>pFR-Luc Plasmid (Reporter Plasmid)</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>
<tr>
<td>pFA2-cJun Plasmid</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>
<tr>
<td>pFC2-dbd</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>
<tr>
<td>pFC-MEKK Plasmid (Positive Control)</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>
</tbody>
</table>

**6.4 Reference to other sections**

- See Section 1 for emergency contact information.
- See Section 8 for information on appropriate personal protective equipment.
- See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

**7.1 Precautions for safe handling**

**Protective measures**

<table>
<thead>
<tr>
<th>Plasmid Type</th>
<th>Protective Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>pFR-Luc Plasmid (Reporter Plasmid)</td>
<td>Put on appropriate personal protective equipment (see Section 8).</td>
</tr>
<tr>
<td>pFA2-cJun Plasmid</td>
<td>Put on appropriate personal protective equipment (see Section 8).</td>
</tr>
<tr>
<td>pFC2-dbd</td>
<td>Put on appropriate personal protective equipment (see Section 8).</td>
</tr>
<tr>
<td>pFC-MEKK Plasmid (Positive Control)</td>
<td>Put on appropriate personal protective equipment (see Section 8).</td>
</tr>
</tbody>
</table>

**Advice on general occupational hygiene**

<table>
<thead>
<tr>
<th>Plasmid Type</th>
<th>Health Advice</th>
</tr>
</thead>
<tbody>
<tr>
<td>pFR-Luc Plasmid (Reporter Plasmid)</td>
<td>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.</td>
</tr>
<tr>
<td>pFA2-cJun Plasmid</td>
<td>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.</td>
</tr>
<tr>
<td>pFC2-dbd</td>
<td>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.</td>
</tr>
<tr>
<td>pFC-MEKK Plasmid (Positive Control)</td>
<td>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.</td>
</tr>
</tbody>
</table>
SECTION 7: Handling and storage

7.2 Conditions for safe storage, including any incompatibilities

Storage:
- **pFR-Luc Plasmid** (Reporter Plasmid)
  
  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.

- **pFA2-cJun Plasmid**
  
  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.

- **pFC2-dbd**
  
  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.

- **pFC-MEKK Plasmid** (Positive Control)
  
  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.

7.3 Specific end use(s)

**Recommendations**:
- **pFR-Luc Plasmid** (Reporter Plasmid)
  
  Industrial applications, Professional applications.

- **pFA2-cJun Plasmid**
  
  Industrial applications, Professional applications.

- **pFC2-dbd**
  
  Industrial applications, Professional applications.

- **pFC-MEKK Plasmid** (Positive Control)
  
  Industrial applications, Professional applications.

**Industrial sector specific solutions**:
- **pFR-Luc Plasmid** (Reporter Plasmid)
  
  Not applicable.

- **pFA2-cJun Plasmid**
  
  Not applicable.

- **pFC2-dbd**
  
  Not applicable.

- **pFC-MEKK Plasmid** (Positive Control)
  
  Not applicable.
SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits
No exposure limit value known.

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

DNELs/DMELs
No DNELs/DMELs available.

PNECs
No PNECs available

8.2 Exposure controls

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

Individual protection measures

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.

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

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

Environmental exposure controls
Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Date of issue/Date of revision: 31/12/2017
### SECTION 9: Physical and chemical properties

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

**Appearance**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pFA2-cJun Plasmid</td>
<td>Liquid.</td>
</tr>
<tr>
<td></td>
<td>pFC2-dbd</td>
<td>Liquid.</td>
</tr>
<tr>
<td></td>
<td>pFC-MEKK Plasmid (Positive Control)</td>
<td>Liquid.</td>
</tr>
</tbody>
</table>

**Colour**

<table>
<thead>
<tr>
<th>Colour</th>
<th>pFR-Luc Plasmid (Reporter Plasmid)</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pFA2-cJun Plasmid</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>pFC2-dbd</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>pFC-MEKK Plasmid (Positive Control)</td>
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</tbody>
</table>

**Odour**

<table>
<thead>
<tr>
<th>Odour</th>
<th>pFR-Luc Plasmid (Reporter Plasmid)</th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pFA2-cJun Plasmid</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>pFC2-dbd</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>pFC-MEKK Plasmid (Positive Control)</td>
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</table>

**Odour threshold**

<table>
<thead>
<tr>
<th>Odour threshold</th>
<th>pFR-Luc Plasmid (Reporter Plasmid)</th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pFA2-cJun Plasmid</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>pFC2-dbd</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>pFC-MEKK Plasmid (Positive Control)</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

**pH**

<table>
<thead>
<tr>
<th>pH</th>
<th>pFR-Luc Plasmid (Reporter Plasmid)</th>
<th>7.5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pFA2-cJun Plasmid</td>
<td>7.5</td>
</tr>
<tr>
<td></td>
<td>pFC2-dbd</td>
<td>7.5</td>
</tr>
<tr>
<td></td>
<td>pFC-MEKK Plasmid (Positive Control)</td>
<td>7.5</td>
</tr>
</tbody>
</table>

**Melting point/freezing point**

<table>
<thead>
<tr>
<th>Melting point/freezing point</th>
<th>pFR-Luc Plasmid (Reporter Plasmid)</th>
<th>0°C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pFA2-cJun Plasmid</td>
<td>0°C</td>
</tr>
<tr>
<td></td>
<td>pFC2-dbd</td>
<td>0°C</td>
</tr>
<tr>
<td></td>
<td>pFC-MEKK Plasmid (Positive Control)</td>
<td>0°C</td>
</tr>
</tbody>
</table>

**Initial boiling point and boiling range**

<table>
<thead>
<tr>
<th>Initial boiling point and boiling range</th>
<th>pFR-Luc Plasmid (Reporter Plasmid)</th>
<th>100°C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pFA2-cJun Plasmid</td>
<td>100°C</td>
</tr>
<tr>
<td></td>
<td>pFC2-dbd</td>
<td>100°C</td>
</tr>
<tr>
<td></td>
<td>pFC-MEKK Plasmid (Positive Control)</td>
<td>100°C</td>
</tr>
</tbody>
</table>

**Flash point**

<table>
<thead>
<tr>
<th>Flash point</th>
<th>pFR-Luc Plasmid (Reporter Plasmid)</th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pFA2-cJun Plasmid</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>pFC2-dbd</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>pFC-MEKK Plasmid (Positive Control)</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

**Evaporation rate**

<table>
<thead>
<tr>
<th>Evaporation rate</th>
<th>pFR-Luc Plasmid (Reporter Plasmid)</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pFA2-cJun Plasmid</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>pFC2-dbd</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>pFC-MEKK Plasmid (Positive Control)</td>
<td>Not available.</td>
</tr>
</tbody>
</table>
### SECTION 9: Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>pFR-Luc Plasmid (Reporter Plasmid)</th>
<th>pFA2-cJun Plasmid</th>
<th>pFC2-dbd</th>
<th>pFC-MEKK Plasmid (Positive Control)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flammability (solid, gas)</strong></td>
<td>Not applicable.</td>
<td>Not applicable.</td>
<td>Not applicable.</td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Upper/lower flammability or explosive limits</strong></td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Vapour pressure</strong></td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Vapour density</strong></td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Solubility(ies)</strong></td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
</tr>
<tr>
<td><strong>Auto-ignition temperature</strong></td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Decomposition temperature</strong></td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>
**PathDetect cJun trans Reporting System, Part Number 219000**

**SECTION 9: Physical and chemical properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>pFR-Luc Plasmid (Reporter Plasmid)</th>
<th>pFA2-cJun Plasmid</th>
<th>pFC2-dbd</th>
<th>pFC-MEKK Plasmid (Positive Control)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explosive properties</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

**SECTION 10: Stability and reactivity**

**10.1 Reactivity**

<table>
<thead>
<tr>
<th>pFR-Luc Plasmid (Reporter Plasmid)</th>
<th>No specific test data related to reactivity available for this product or its ingredients.</th>
</tr>
</thead>
<tbody>
<tr>
<td>pFA2-cJun Plasmid</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
<tr>
<td>pFC2-dbd</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
<tr>
<td>pFC-MEKK Plasmid (Positive Control)</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
</tbody>
</table>

**10.2 Chemical stability**

<table>
<thead>
<tr>
<th>pFR-Luc Plasmid (Reporter Plasmid)</th>
<th>The product is stable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>pFA2-cJun Plasmid</td>
<td>The product is stable.</td>
</tr>
<tr>
<td>pFC2-dbd</td>
<td>The product is stable.</td>
</tr>
<tr>
<td>pFC-MEKK Plasmid (Positive Control)</td>
<td>The product is stable.</td>
</tr>
</tbody>
</table>

**10.3 Possibility of hazardous reactions**

<table>
<thead>
<tr>
<th>pFR-Luc Plasmid (Reporter Plasmid)</th>
<th>Under normal conditions of storage and use, hazardous reactions will not occur.</th>
</tr>
</thead>
<tbody>
<tr>
<td>pFA2-cJun Plasmid</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
<tr>
<td>pFC2-dbd</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
<tr>
<td>pFC-MEKK Plasmid (Positive Control)</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
</tbody>
</table>

**10.4 Conditions to avoid**

<table>
<thead>
<tr>
<th>pFR-Luc Plasmid (Reporter Plasmid)</th>
<th>No specific data.</th>
</tr>
</thead>
<tbody>
<tr>
<td>pFA2-cJun Plasmid</td>
<td>No specific data.</td>
</tr>
<tr>
<td>pFC2-dbd</td>
<td>No specific data.</td>
</tr>
<tr>
<td>pFC-MEKK Plasmid (Positive Control)</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

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## SECTION 10: Stability and reactivity

### 10.5 Incompatible materials

<table>
<thead>
<tr>
<th>Material</th>
<th>Compatibility Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>pFR-Luc Plasmid (Reporter Plasmid)</td>
<td>May react or be incompatible with oxidising materials.</td>
</tr>
<tr>
<td>pFA2-cJun Plasmid</td>
<td>May react or be incompatible with oxidising materials.</td>
</tr>
<tr>
<td>pFC2-db</td>
<td>May react or be incompatible with oxidising materials.</td>
</tr>
<tr>
<td>pFC-MEKK Plasmid (Positive Control)</td>
<td>May react or be incompatible with oxidising materials.</td>
</tr>
</tbody>
</table>

### 10.6 Hazardous decomposition products

<table>
<thead>
<tr>
<th>Material</th>
<th>Stability Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>pFR-Luc Plasmid (Reporter Plasmid)</td>
<td>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</td>
</tr>
<tr>
<td>pFA2-cJun Plasmid</td>
<td>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</td>
</tr>
<tr>
<td>pFC2-db</td>
<td>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</td>
</tr>
<tr>
<td>pFC-MEKK Plasmid (Positive Control)</td>
<td>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</td>
</tr>
</tbody>
</table>

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

- Not available.

#### Acute toxicity estimates

- Not available.

#### Irritation/Corrosion

- Conclusion/Summary: Not available.

#### Sensitiser

- Conclusion/Summary: 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

<table>
<thead>
<tr>
<th>Material</th>
<th>Route Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>pFR-Luc Plasmid (Reporter Plasmid)</td>
<td>Not available.</td>
</tr>
<tr>
<td>pFA2-cJun Plasmid</td>
<td>Not available.</td>
</tr>
<tr>
<td>pFC2-db</td>
<td>Not available.</td>
</tr>
<tr>
<td>pFC-MEKK Plasmid (Positive Control)</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

#### Potential acute health effects

<table>
<thead>
<tr>
<th>Material</th>
<th>Health Effects Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>pFR-Luc Plasmid (Reporter Plasmid)</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>pFA2-cJun Plasmid</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>pFC2-db</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>pFC-MEKK Plasmid (Positive Control)</td>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>

### Ingestion

- Conclusion/Summary: Not available.
**SECTION 11: Toxicological information**

<table>
<thead>
<tr>
<th>Skin contact</th>
<th>pFR-Luc Plasmid (Reporter Plasmid)</th>
<th>No known significant effects or critical hazards.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pFA2-cJun Plasmid</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pFC2-dbd</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pFC-MEK Plasmid (Positive Control)</td>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>

**Eye contact**

<table>
<thead>
<tr>
<th>Eye contact</th>
<th>pFR-Luc Plasmid (Reporter Plasmid)</th>
<th>No known significant effects or critical hazards.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pFA2-cJun Plasmid</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pFC2-dbd</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pFC-MEK Plasmid (Positive Control)</td>
<td>No known significant effects or critical hazards.</td>
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</tbody>
</table>

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

**Inhalation**

<table>
<thead>
<tr>
<th>Ingestion</th>
<th>pFR-Luc Plasmid (Reporter Plasmid)</th>
<th>No specific data.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pFA2-cJun Plasmid</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>pFC2-dbd</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>pFC-MEK Plasmid (Positive Control)</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

**Skin contact**

<table>
<thead>
<tr>
<th>Skin contact</th>
<th>pFR-Luc Plasmid (Reporter Plasmid)</th>
<th>No specific data.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pFA2-cJun Plasmid</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>pFC2-dbd</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>pFC-MEK Plasmid (Positive Control)</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

**Eye contact**

<table>
<thead>
<tr>
<th>Eye contact</th>
<th>pFR-Luc Plasmid (Reporter Plasmid)</th>
<th>No specific data.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pFA2-cJun Plasmid</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>pFC2-dbd</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>pFC-MEK Plasmid (Positive Control)</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**: Not available.
- **Potential delayed effects**: Not available.

**Long term exposure**

- **Potential immediate effects**: Not available.
- **Potential delayed effects**: Not available.

**Potential chronic health effects**

**General**

<table>
<thead>
<tr>
<th>General</th>
<th>pFR-Luc Plasmid (Reporter Plasmid)</th>
<th>No known significant effects or critical hazards.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pFA2-cJun Plasmid</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pFC2-dbd</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pFC-MEK Plasmid (Positive Control)</td>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>

**Date of issue/Date of revision**

: 31/12/2017
SECTION 11: Toxicological information

<table>
<thead>
<tr>
<th>Carcinogenicity</th>
<th>pFR-Luc Plasmid (Reporter Plasmid)</th>
<th>No known significant effects or critical hazards.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pFA2-cJun Plasmid</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pFC2-dbd</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pFC-MEKK Plasmid (Positive Control)</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Mutagenicity</td>
<td>pFR-Luc Plasmid (Reporter Plasmid)</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pFA2-cJun Plasmid</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pFC2-dbd</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pFC-MEKK Plasmid (Positive Control)</td>
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</tr>
<tr>
<td>Teratogenicity</td>
<td>pFR-Luc Plasmid (Reporter Plasmid)</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pFA2-cJun Plasmid</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pFC2-dbd</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pFC-MEKK Plasmid (Positive Control)</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Developmental effects</td>
<td>pFR-Luc Plasmid (Reporter Plasmid)</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pFA2-cJun Plasmid</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pFC2-dbd</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pFC-MEKK Plasmid (Positive Control)</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Fertility effects</td>
<td>pFR-Luc Plasmid (Reporter Plasmid)</td>
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</tr>
<tr>
<td></td>
<td>pFA2-cJun Plasmid</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pFC2-dbd</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pFC-MEKK Plasmid (Positive Control)</td>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>

SECTION 12: Ecological information

12.1 Toxicity

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Not available.

12.3 Bioaccumulative potential

Not available.

12.4 Mobility in soil

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

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.

12.6 Other adverse effects : No known significant effects or critical hazards.
SECTION 13: Disposal considerations

13.1 Waste treatment methods

**Product**

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

**Hazardous waste**

Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 2008/98/EC.

**Packaging**

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

**Special precautions**

This material and its container must be disposed of in a safe way. 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

14.6 Special precautions for user

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

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not available.

SECTION 15: Regulatory information

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

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

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

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

- pFR-Luc Plasmid (Reporter Plasmid): Not applicable.
- pFA2-cJun Plasmid: Not applicable.
- pFC2-dbd: Not applicable.
- pFC-MEKK Plasmid (Positive Control): Not applicable.

Other EU regulations

**Ozone depleting substances (1005/2009/EU)**

Not listed.

**Prior Informed Consent (PIC) (649/2012/EU)**

Not listed.

**Seveso Directive**

This product is not controlled under the Seveso Directive.

International regulations

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SECTION 15: Regulatory information

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

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

SECTION 16: Other information

Indicates information that has changed from previously issued version.

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

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

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not classified.</td>
<td></td>
</tr>
</tbody>
</table>

Full text of abbreviated H statements
Not applicable.

Full text of classifications [CLP/GHS]
Not applicable.

Date of issue/Date of revision : 31/12/2017
### SECTION 16: Other information

**Date of issue/ Date of revision**: 31/12/2017

**Date of previous issue**: No previous validation.

**Version**: 1

**Notice to reader**

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