SAFETY DATA SHEET
PathDetect SRE cis Reporting System, Part Number 219079

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

1.1 Product identifier
Product name: PathDetect SRE cis Reporting System, Part Number 219079
Part No. (Kit): 219079
Part No.:
- pSRE-Luc 219080-51
- pFC-MEKK Plasmid (Positive Control) 219058-51

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

<table>
<thead>
<tr>
<th>Identified uses</th>
<th>Identified uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>pSRE-Luc</td>
<td>0.05 ml (50 µg 1 µg/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:
- pSRE-Luc: 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
Signal word:
- pSRE-Luc: No signal word.
- pFC-MEKK Plasmid (Positive Control): No signal word.

Hazard statements:
- pSRE-Luc: No known significant effects or critical hazards.
- pFC-MEKK Plasmid (Positive Control): No known significant effects or critical hazards.

Precautionary statements

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

Prevention: pSRE-Luc Not applicable. pFC-MEKK Plasmid (Positive Control) Not applicable.
Response: pSRE-Luc Not applicable. pFC-MEKK Plasmid (Positive Control) Not applicable.
Storage: pSRE-Luc Not applicable. pFC-MEKK Plasmid (Positive Control) Not applicable.
Disposal: pSRE-Luc Not applicable. pFC-MEKK Plasmid (Positive Control) Not applicable.

SECTION 3: Composition/information on ingredients

3.1 Substances: pSRE-Luc 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

SECTION 4: First aid measures

4.1 Description of first aid measures
Eye contact: pSRE-Luc 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.
SECTION 4: First aid measures

**Inhalation**
- pSRE-Luc: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- pFC-MEK 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**
- pSRE-Luc: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- pFC-MEK Plasmid (Positive Control): Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

**Ingestion**
- pSRE-Luc: 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-MEK 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**
- pSRE-Luc: No action shall be taken involving any personal risk or without suitable training.
- pFC-MEK 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**
- pSRE-Luc: No known significant effects or critical hazards.
- pFC-MEK Plasmid (Positive Control): No known significant effects or critical hazards.

**Inhalation**
- pSRE-Luc: No known significant effects or critical hazards.
- pFC-MEK Plasmid (Positive Control): No known significant effects or critical hazards.

**Skin contact**
- pSRE-Luc: No known significant effects or critical hazards.
- pFC-MEK Plasmid (Positive Control): No known significant effects or critical hazards.

**Ingestion**
- pSRE-Luc: No known significant effects or critical hazards.
- pFC-MEK Plasmid (Positive Control): No known significant effects or critical hazards.

**Over-exposure signs/symptoms**

**Eye contact**
- pSRE-Luc: No specific data.
- pFC-MEK Plasmid (Positive Control): No specific data.

**Inhalation**
- pSRE-Luc: No specific data.
- pFC-MEK Plasmid (Positive Control): No specific data.

**Skin contact**
- pSRE-Luc: No specific data.
- pFC-MEK Plasmid (Positive Control): No specific data.

**Ingestion**
- pSRE-Luc: No specific data.
- pFC-MEK Plasmid (Positive Control): No specific data.
SECTION 4: First aid measures

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician

<table>
<thead>
<tr>
<th>Substance</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>pSRE-Luc</td>
<td>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</td>
</tr>
<tr>
<td>pFC-MEKK Plasmid (Positive Control)</td>
<td>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</td>
</tr>
</tbody>
</table>

Specific treatments

<table>
<thead>
<tr>
<th>Substance</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>pSRE-Luc</td>
<td>No specific treatment.</td>
</tr>
<tr>
<td>pFC-MEKK Plasmid (Positive Control)</td>
<td>No specific treatment.</td>
</tr>
</tbody>
</table>

SECTION 5: Firefighting measures

5.1 Extinguishing media

<table>
<thead>
<tr>
<th>Substance</th>
<th>Suitable extinguishing media</th>
<th>Unsuitable extinguishing media</th>
</tr>
</thead>
<tbody>
<tr>
<td>pSRE-Luc</td>
<td>Use an extinguishing agent suitable for the surrounding fire.</td>
<td>None known.</td>
</tr>
<tr>
<td>pFC-MEKK Plasmid (Positive Control)</td>
<td>Use an extinguishing agent suitable for the surrounding fire.</td>
<td>None known.</td>
</tr>
</tbody>
</table>

5.2 Special hazards arising from the substance or mixture

<table>
<thead>
<tr>
<th>Substance</th>
<th>Hazards from the substance or mixture</th>
<th>Hazardous combustion products</th>
</tr>
</thead>
<tbody>
<tr>
<td>pSRE-Luc</td>
<td>In a fire or if heated, a pressure increase will occur and the container may burst.</td>
<td>No specific data.</td>
</tr>
<tr>
<td>pFC-MEKK Plasmid (Positive Control)</td>
<td>In a fire or if heated, a pressure increase will occur and the container may burst.</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

5.3 Advice for firefighters

<table>
<thead>
<tr>
<th>Substance</th>
<th>Special precautions for fire-fighters</th>
<th>Special protective equipment for fire-fighters</th>
</tr>
</thead>
<tbody>
<tr>
<td>pSRE-Luc</td>
<td>Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.</td>
<td>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.</td>
</tr>
<tr>
<td>pFC-MEKK Plasmid (Positive Control)</td>
<td>Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.</td>
<td>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.</td>
</tr>
</tbody>
</table>

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

<table>
<thead>
<tr>
<th>Substance</th>
<th>For non-emergency personnel</th>
<th>pSRE-Luc</th>
</tr>
</thead>
<tbody>
<tr>
<td>pSRE-Luc</td>
<td>No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.</td>
<td>No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering.</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.</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.</td>
</tr>
</tbody>
</table>
SECTION 6: Accidental release measures

For emergency responders

- **pSRE-Luc**: Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
- **pFC-MEKK Plasmid (Positive Control)**: 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".

6.2 Environmental precautions

- **pSRE-Luc**: 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).
- **pFC-MEKK Plasmid (Positive Control)**: 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).

6.3 Methods and material for containment and cleaning up

- **Methods for cleaning up (pSRE-Luc)**: 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.
- **Methods for cleaning up (pFC-MEKK Plasmid (Positive Control))**: 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.

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 (pSRE-Luc)**: Put on appropriate personal protective equipment (see Section 8).
- **Protective measures (pFC-MEKK Plasmid (Positive Control))**: Put on appropriate personal protective equipment (see Section 8).
- **Advice on general occupational hygiene (pSRE-Luc)**: 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.
- **Advice on general occupational hygiene (pFC-MEKK Plasmid (Positive Control))**: 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.

7.2 Conditions for safe storage, including any incompatibilities
PathDetect SRE cis Reporting System, Part Number 219079

SECTION 7: Handling and storage

<table>
<thead>
<tr>
<th>Storage</th>
<th>:</th>
<th>pSRE-Luc</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.</td>
</tr>
<tr>
<td>pFC-MEKK Plasmid (Positive Control)</td>
<td></td>
<td>Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.</td>
</tr>
</tbody>
</table>

7.3 Specific end use(s)

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>:</th>
<th>pSRE-Luc</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Industrial applications, Professional applications.</td>
</tr>
<tr>
<td>pFC-MEKK Plasmid (Positive Control)</td>
<td></td>
<td>Industrial applications, Professional applications.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Industrial sector specific solutions</th>
<th>:</th>
<th>pSRE-Luc</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Not applicable.</td>
</tr>
<tr>
<td>pFC-MEKK Plasmid (Positive Control)</td>
<td></td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

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. |

<table>
<thead>
<tr>
<th>DNELs/DMELs</th>
<th>:</th>
<th>No DNELs/DMELs available.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>PNECs</th>
<th>:</th>
<th>No PNECs available</th>
</tr>
</thead>
</table>

8.2 Exposure controls

| Appropriate engineering controls | : | Good general ventilation should be sufficient to control worker exposure to airborne contaminants. |
| Individual protection measures |   | |

Date of issue/Date of revision  : 31/12/2017
SECTION 8: Exposure controls/personal protection

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection
Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

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

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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>pSRE-Luc (Positive Control)</th>
<th>pFC-MEK Plasmid (Positive Control)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid.</td>
<td>Liquid.</td>
</tr>
<tr>
<td>Colour</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Odour</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>pH</td>
<td>7.5</td>
<td>7.5</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>0°C</td>
<td>0°C</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>100°C</td>
<td>100°C</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Property</th>
<th>pSRE-Luc</th>
<th>pFC-MEKK Plasmid (Positive Control)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vapour pressure</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable.</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapour density</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Solubility(ies)</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>Partition coefficient: n-octanol/water</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

9.2 Other information
No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity
No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability
The product is stable.

Date of issue/Date of revision: 31/12/2017
SECTION 10: Stability and reactivity

10.3 Possibility of hazardous reactions

<table>
<thead>
<tr>
<th>Product</th>
<th>Reaction</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>pSRE-Luc</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
<td>pFC-MEKK Plasmid (Positive Control)</td>
</tr>
<tr>
<td>pFC-MEKK Plasmid</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
<td>(Positive Control)</td>
</tr>
</tbody>
</table>

10.4 Conditions to avoid

<table>
<thead>
<tr>
<th>Product</th>
<th>Info</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>pSRE-Luc</td>
<td>No specific data.</td>
<td>pFC-MEKK Plasmid (Positive Control)</td>
</tr>
<tr>
<td>pFC-MEKK Plasmid</td>
<td>No specific data.</td>
<td>(Positive Control)</td>
</tr>
</tbody>
</table>

10.5 Incompatible materials

<table>
<thead>
<tr>
<th>Product</th>
<th>Info</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>pSRE-Luc</td>
<td>May react or be incompatible with oxidising materials.</td>
<td>pFC-MEKK Plasmid (Positive Control)</td>
</tr>
<tr>
<td>pFC-MEKK Plasmid</td>
<td>May react or be incompatible with oxidising materials.</td>
<td>(Positive Control)</td>
</tr>
</tbody>
</table>

10.6 Hazardous decomposition products

<table>
<thead>
<tr>
<th>Product</th>
<th>Info</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>pSRE-Luc</td>
<td>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</td>
<td>pFC-MEKK Plasmid (Positive Control)</td>
</tr>
<tr>
<td>pFC-MEKK Plasmid</td>
<td>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</td>
<td>(Positive Control)</td>
</tr>
</tbody>
</table>

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Product</th>
<th>Info</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>pSRE-Luc</td>
<td>No known significant effects or critical hazards.</td>
<td>(Positive Control)</td>
</tr>
<tr>
<td>pFC-MEKK Plasmid</td>
<td>No known significant effects or critical hazards.</td>
<td>(Positive Control)</td>
</tr>
</tbody>
</table>

Acute toxicity estimates

<table>
<thead>
<tr>
<th>Product</th>
<th>Info</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>pSRE-Luc</td>
<td>Not available.</td>
<td>(Positive Control)</td>
</tr>
<tr>
<td>pFC-MEKK Plasmid</td>
<td>Not available.</td>
<td>(Positive Control)</td>
</tr>
</tbody>
</table>

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>Product</th>
<th>Info</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>pSRE-Luc</td>
<td>Not available.</td>
<td>pFC-MEKK Plasmid (Positive Control)</td>
</tr>
<tr>
<td>pFC-MEKK Plasmid</td>
<td>Not available.</td>
<td>(Positive Control)</td>
</tr>
</tbody>
</table>

Potential acute health effects

Inhalation

<table>
<thead>
<tr>
<th>Product</th>
<th>Info</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>pSRE-Luc</td>
<td>No known significant effects or critical hazards.</td>
<td>pFC-MEKK Plasmid (Positive Control)</td>
</tr>
<tr>
<td>pFC-MEKK Plasmid</td>
<td>No known significant effects or critical hazards.</td>
<td>(Positive Control)</td>
</tr>
</tbody>
</table>

Ingestion

<table>
<thead>
<tr>
<th>Product</th>
<th>Info</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>pSRE-Luc</td>
<td>No known significant effects or critical hazards.</td>
<td>pFC-MEKK Plasmid (Positive Control)</td>
</tr>
<tr>
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<td>No known significant effects or critical hazards.</td>
<td>(Positive Control)</td>
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</table>

Skin contact

<table>
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<tr>
<th>Product</th>
<th>Info</th>
<th>Notes</th>
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</thead>
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Eye contact

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</tr>
<tr>
<td>pFC-MEKK Plasmid</td>
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<td>(Positive Control)</td>
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Symptoms related to the physical, chemical and toxicological characteristics

Date of issue/Date of revision: 31/12/2017
SECTION 11: Toxicological information

Inhalation:
- pSRE-Luc: No specific data.
- pFC-MEKK Plasmid (Positive Control): No specific data.

Ingestion:
- pSRE-Luc: No specific data.
- pFC-MEKK Plasmid (Positive Control): No specific data.

Skin contact:
- pSRE-Luc: No specific data.
- pFC-MEKK Plasmid (Positive Control): No specific data.

Eye contact:
- pSRE-Luc: No specific data.
- pFC-MEKK Plasmid (Positive Control): No specific data.

Potential chronic health effects:
General:
- pSRE-Luc: No known significant effects or critical hazards.
- pFC-MEKK Plasmid (Positive Control): No known significant effects or critical hazards.

Carcinogenicity:
- pSRE-Luc: No known significant effects or critical hazards.
- pFC-MEKK Plasmid (Positive Control): No known significant effects or critical hazards.

Mutagenicity:
- pSRE-Luc: No known significant effects or critical hazards.
- pFC-MEKK Plasmid (Positive Control): No known significant effects or critical hazards.

Teratogenicity:
- pSRE-Luc: No known significant effects or critical hazards.
- pFC-MEKK Plasmid (Positive Control): No known significant effects or critical hazards.

Developmental effects:
- pSRE-Luc: No known significant effects or critical hazards.
- pFC-MEKK Plasmid (Positive Control): No known significant effects or critical hazards.

Fertility effects:
- pSRE-Luc: No known significant effects or critical hazards.
- pFC-MEKK Plasmid (Positive Control): No known significant effects or critical hazards.

SECTION 12: Ecological information

12.1 Toxicity
Conclusion/Summary: Not available.

12.2 Persistence and degradability
Not available.

12.3 Bioaccumulative potential
Not available.
SECTION 12: Ecological information

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 spilt 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.

PathDetect SRE cis Reporting System, Part Number 219079

SECTION 15: Regulatory information

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

- pSRE-Luc
- pFC-MEKK Plasmid (Positive Control)

Other EU regulations

- Ozone depleting substances (1005/2009/EU)
  Not applicable.
- Prior Informed Consent (PIC) (649/2012/EU)
  Not applicable.

International regulations

- Seveso Directive
  This product is not controlled under the Seveso Directive.
- 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>
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<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
Date of previous issue: No previous validation.
Version: 1

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