SAFETY DATA SHEET
StrataClone SoloPack Competent Cells, Part Number 200185

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

1.1 Product identifier
Product name: StrataClone SoloPack Competent Cells, Part Number 200185
Part no. (chemical kit): 200185
Part no.: StrataClone SoloPack 200185-41
                     Competent Cells 200231-42
                     pUC 18 DNA Control
                     Plasmid

1.2 Relevant identified uses of the substance or mixture and uses advised against
Material uses: Analytical reagent.

StrataClone SoloPack Competent Cells 21 x 0.05 ml (50 µl)
pUC 18 DNA Control Plasmid 0.01 ml (0.1 ng/µl)

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: StrataClone SoloPack Mixture
                      Competent Cells Mixture
                      pUC 18 DNA Control
                      Plasmid

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

Ingredients of unknown toxicity: StrataClone SoloPack Percentage of the mixture consisting of ingredient(s) of
                      Competent Cells unknown acute inhalation toxicity: 10 - 30%
                      pUC 18 DNA Control
                      Plasmid

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: StrataClone SoloPack No signal word.
              Competent Cells
              pUC 18 DNA Control
              Plasmid

Date of issue/Date of revision: 16/04/2019
SECTION 2: Hazards identification

Hazard statements: StrataClone SoloPack Competent Cells pUC 18 DNA Control Plasmid
No known significant effects or critical hazards.

pUC 18 DNA Control Plasmid
No known significant effects or critical hazards.

Precautionary statements

Prevention: StrataClone SoloPack Competent Cells pUC 18 DNA Control Plasmid
Not applicable.

Response: StrataClone SoloPack Competent Cells pUC 18 DNA Control Plasmid
Not applicable.

Storage: StrataClone SoloPack Competent Cells pUC 18 DNA Control Plasmid
Not applicable.

Disposal: StrataClone SoloPack Competent Cells pUC 18 DNA Control Plasmid
Not applicable.

Hazardous ingredients: StrataClone SoloPack Competent Cells
Not applicable.

Supplemental label elements

StrataClone SoloPack Competent Cells pUC 18 DNA Control Plasmid
Safety data sheet available on request.

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

StrataClone SoloPack Competent Cells pUC 18 DNA Control Plasmid
Not applicable.

Special packaging requirements

StrataClone SoloPack Competent Cells pUC 18 DNA Control Plasmid
Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

StrataClone SoloPack Competent Cells pUC 18 DNA Control Plasmid
This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

StrataClone SoloPack Competent Cells pUC 18 DNA Control Plasmid
This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification: StrataClone SoloPack Competent Cells pUC 18 DNA Control Plasmid
None known.

StrataClone SoloPack Competent Cells pUC 18 DNA Control Plasmid
None known.
SECTION 3: Composition/information on ingredients

3.1 Substances:
StrataClone SoloPack Competent Cells Mixture
pUC 18 DNA Control Plasmid Mixture

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Identifiers</th>
<th>%</th>
<th>Regulation (EC) No. 1272/2008 [CLP]</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium chloride (CaCl2), dihydrate</td>
<td>≤3</td>
<td>Eye Irrit. 2, H319</td>
<td>[1]</td>
<td></td>
</tr>
</tbody>
</table>

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

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:
StrataClone SoloPack Competent Cells
pUC 18 DNA Control 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.

Inhalation:
StrataClone SoloPack Competent Cells
pUC 18 DNA Control Plasmid
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Skin contact:
StrataClone SoloPack Competent Cells
pUC 18 DNA Control Plasmid
Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Ingestion:
StrataClone SoloPack Competent Cells
pUC 18 DNA Control 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.

Date of issue/Date of revision: 16/04/2019
**SECTION 4: First aid measures**

<table>
<thead>
<tr>
<th>Protection of first-aiders</th>
<th>StrataClone SoloPack Competent Cells</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pUC 18 DNA Control Plasmid</td>
</tr>
<tr>
<td>personnel. Get medical attention if symptoms occur.</td>
<td>No action shall be taken involving any personal risk or without suitable training.</td>
</tr>
</tbody>
</table>

### 4.2 Most important symptoms and effects, both acute and delayed

#### Potential acute health effects

<table>
<thead>
<tr>
<th>Eye contact</th>
<th>StrataClone SoloPack Competent Cells</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingestion</td>
<td>pUC 18 DNA Control Plasmid</td>
</tr>
<tr>
<td>Skin contact</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>StrataClone SoloPack Competent Cells</td>
</tr>
<tr>
<td>pUC 18 DNA Control Plasmid</td>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Eye contact</th>
<th>StrataClone SoloPack Competent Cells</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin contact</td>
<td>pUC 18 DNA Control Plasmid</td>
</tr>
<tr>
<td>Inhalation</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>StrataClone SoloPack Competent Cells</td>
</tr>
<tr>
<td>pUC 18 DNA Control Plasmid</td>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>

#### Over-exposure signs/symptoms

<table>
<thead>
<tr>
<th>Eye contact</th>
<th>StrataClone SoloPack Competent Cells</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin contact</td>
<td>pUC 18 DNA Control Plasmid</td>
</tr>
<tr>
<td>Inhalation</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>StrataClone SoloPack Competent Cells</td>
</tr>
<tr>
<td>pUC 18 DNA Control Plasmid</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

#### 4.3 Indication of any immediate medical attention and special treatment needed

<table>
<thead>
<tr>
<th>Notes to physician</th>
<th>StrataClone SoloPack Competent Cells</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingestion</td>
<td>pUC 18 DNA Control Plasmid</td>
</tr>
<tr>
<td>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specific treatments</th>
<th>StrataClone SoloPack Competent Cells</th>
</tr>
</thead>
<tbody>
<tr>
<td>pUC 18 DNA Control Plasmid</td>
<td>No specific treatment.</td>
</tr>
</tbody>
</table>

**Date of issue/Date of revision**: 16/04/2019
SECTION 5: Firefighting measures

5.1 Extinguishing media

<table>
<thead>
<tr>
<th>Suitable extinguishing media</th>
<th>StrataClone SoloPack Competent Cells</th>
<th>Use an extinguishing agent suitable for the surrounding fire.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pUC 18 DNA Control Plasmid</td>
<td>Use an extinguishing agent suitable for the surrounding fire.</td>
</tr>
<tr>
<td>Unsuitable extinguishing media</td>
<td>StrataClone SoloPack Competent Cells</td>
<td>None known.</td>
</tr>
<tr>
<td></td>
<td>pUC 18 DNA Control Plasmid</td>
<td>None known.</td>
</tr>
</tbody>
</table>

5.2 Special hazards arising from the substance or mixture

<table>
<thead>
<tr>
<th>Hazards from the substance or mixture</th>
<th>StrataClone SoloPack Competent Cells</th>
<th>In a fire or if heated, a pressure increase will occur and the container may burst.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pUC 18 DNA Control Plasmid</td>
<td>In a fire or if heated, a pressure increase will occur and the container may burst.</td>
</tr>
<tr>
<td>Hazardous combustion products</td>
<td>StrataClone SoloPack Competent Cells</td>
<td>Decomposition products may include the following materials:</td>
</tr>
<tr>
<td></td>
<td>pUC 18 DNA Control Plasmid</td>
<td>carbon dioxide</td>
</tr>
<tr>
<td></td>
<td></td>
<td>carbon monoxide</td>
</tr>
<tr>
<td></td>
<td></td>
<td>halogenated compounds</td>
</tr>
<tr>
<td></td>
<td></td>
<td>metal oxide/oxides</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

5.3 Advice for firefighters

<table>
<thead>
<tr>
<th>Special precautions for fire-fighters</th>
<th>StrataClone SoloPack Competent Cells</th>
<th>Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pUC 18 DNA Control Plasmid</td>
<td>Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.</td>
</tr>
<tr>
<td>Special protective equipment for fire-fighters</td>
<td>StrataClone SoloPack Competent Cells</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></td>
<td>pUC 18 DNA Control Plasmid</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>For non-emergency personnel</th>
<th>StrataClone SoloPack Competent Cells</th>
<th>No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spill material. Put on appropriate personal protective equipment.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pUC 18 DNA Control 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 spill material. Put on appropriate personal protective equipment.</td>
</tr>
</tbody>
</table>

Date of issue/Date of revision: 16/04/2019
SECTION 6: Accidental release measures

For emergency responders:

<table>
<thead>
<tr>
<th>Product</th>
<th>Advice</th>
</tr>
</thead>
<tbody>
<tr>
<td>StrataClone SoloPack Competent Cells</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>pUC 18 DNA Control 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>
</tbody>
</table>

6.2 Environmental precautions:

<table>
<thead>
<tr>
<th>Product</th>
<th>Advice</th>
</tr>
</thead>
<tbody>
<tr>
<td>StrataClone SoloPack Competent Cells</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>pUC 18 DNA Control 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>
</tbody>
</table>

6.3 Methods and material for containment and cleaning up:

<table>
<thead>
<tr>
<th>Method</th>
<th>Advice</th>
</tr>
</thead>
<tbody>
<tr>
<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>
<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:

<table>
<thead>
<tr>
<th>Protective measures</th>
<th>Advice</th>
</tr>
</thead>
<tbody>
<tr>
<td>StrataClone SoloPack Competent Cells</td>
<td>Put on appropriate personal protective equipment (see Section 8).</td>
</tr>
<tr>
<td>pUC 18 DNA Control Plasmid</td>
<td>Put on appropriate personal protective equipment (see Section 8).</td>
</tr>
<tr>
<td>StrataClone SoloPack Competent Cells</td>
<td>Potentially biohazardous material. 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>pUC 18 DNA Control 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>
</tbody>
</table>

7.2 Conditions for safe storage, including any incompatibilities

Date of issue/Date of revision: 16/04/2019
StrataClone SoloPack Competent Cells, Part Number 200185

SECTION 7: Handling and storage

Storage

- **StrataClone SoloPack Competent Cells**: 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.

- **pUC 18 DNA Control 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.

7.3 Specific end use(s)

**Recommendations**

- **Industrial sector specific solutions**
  - **StrataClone SoloPack Competent Cells**: Industrial applications, Professional applications.
  - **pUC 18 DNA Control Plasmid**: Industrial applications, Professional applications.

**Industrial applications**, **Professional applications**.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

**Occupational exposure limits**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Exposure limit values</th>
</tr>
</thead>
<tbody>
<tr>
<td>StrataClone SoloPack Competent Cells Glycerol</td>
<td>EH40/2005 WELs (United Kingdom (UK), 12/2011). TWA: 10 mg/m³ 8 hours. Form: Mist</td>
</tr>
</tbody>
</table>

**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

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SECTION 8: Exposure controls/personal protection

8.2 Exposure controls

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

Individual protection measures

Hygiene measures: Handle as biohazard material (Biosafety level 1). 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

Appearance

Physical state: StrataClone SoloPack Competent Cells Liquid.
pUC 18 DNA Control Plasmid Liquid.

Colour: StrataClone SoloPack Competent Cells Not available.
pUC 18 DNA Control Plasmid Not available.

Odour: StrataClone SoloPack Competent Cells Not available.
pUC 18 DNA Control Plasmid Not available.

Odour threshold: StrataClone SoloPack Competent Cells Not available.
pUC 18 DNA Control Plasmid Not available.
### SECTION 9: Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>StrataClone SoloPack Competent Cells</th>
<th>pUC 18 DNA Control Plasmid</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>pH</strong></td>
<td>Not available.</td>
<td>7.5</td>
</tr>
<tr>
<td><strong>Melting point/freezing point</strong></td>
<td>StrataClone SoloPack Competent Cells</td>
<td>0°C</td>
</tr>
<tr>
<td><strong>Initial boiling point and boiling range</strong></td>
<td>StrataClone SoloPack Competent Cells</td>
<td>100°C</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>StrataClone SoloPack Competent Cells</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>StrataClone SoloPack Competent Cells</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Flammability (solid, gas)</strong></td>
<td>StrataClone SoloPack Competent Cells</td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Upper/lower flammability or explosive limits</strong></td>
<td>StrataClone SoloPack Competent Cells</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Vapour pressure</strong></td>
<td>StrataClone SoloPack Competent Cells</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Vapour density</strong></td>
<td>StrataClone SoloPack Competent Cells</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>StrataClone SoloPack Competent Cells</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Solubility(ies)</strong></td>
<td>StrataClone SoloPack Competent Cells</td>
<td>Soluble in the following materials: cold water and hot water. Easily soluble in the following materials: cold water and hot water.</td>
</tr>
<tr>
<td><strong>Partition coefficient: n-octanol/water</strong></td>
<td>StrataClone SoloPack Competent Cells</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Auto-ignition temperature</strong></td>
<td>StrataClone SoloPack Competent Cells</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Decomposition temperature</strong></td>
<td>StrataClone SoloPack Competent Cells</td>
<td>Not available.</td>
</tr>
</tbody>
</table>
SECTION 9: Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>StrataClone SoloPack Competent Cells</th>
<th>pUC 18 DNA Control Plasmid</th>
</tr>
</thead>
<tbody>
<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.

10.3 Possibility of hazardous reactions
Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid
No specific data.

10.5 Incompatible materials
May react or be incompatible with oxidising materials.

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

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity
Not available.

Acute toxicity estimates
N/A

Irritation/Corrosion

Date of issue/Date of revision: 16/04/2019
StrataClone SoloPack Competent Cells, Part Number 200185

SECTION 11: Toxicological information

Conclusion/Summary: Not available.

Sensitiser
Conclusion/Summary: Not available.

Mutagenicity
Conclusion/Summary: Not available.

Carcinogenicity
Conclusion/Summary: Not available.

Reproductive toxicity
Conclusion/Summary: Not available.

Teratogenicity
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:
- StrataClone SoloPack Competent Cells
- pUC 18 DNA Control Plasmid

Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Inhalation: StrataClone SoloPack Competent Cells No known significant effects or critical hazards.
- pUC 18 DNA Control Plasmid No known significant effects or critical hazards.

Ingestion: StrataClone SoloPack Competent Cells No known significant effects or critical hazards.
- pUC 18 DNA Control Plasmid No known significant effects or critical hazards.

Skin contact: StrataClone SoloPack Competent Cells No known significant effects or critical hazards.
- pUC 18 DNA Control Plasmid No known significant effects or critical hazards.

Eye contact: StrataClone SoloPack Competent Cells No known significant effects or critical hazards.
- pUC 18 DNA Control Plasmid No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation: StrataClone SoloPack Competent Cells No specific data.
- pUC 18 DNA Control Plasmid No specific data.

Ingestion: StrataClone SoloPack Competent Cells No specific data.
- pUC 18 DNA Control Plasmid No specific data.

Skin contact: StrataClone SoloPack Competent Cells No specific data.
- pUC 18 DNA Control Plasmid No specific data.

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SECTION 11: Toxicological information

Potential chronic health effects

General:

- **StrataClone SoloPack Competent Cells**: No known significant effects or critical hazards.
- **pUC 18 DNA Control Plasmid**: No known significant effects or critical hazards.

Carcinogenicity:

- **StrataClone SoloPack Competent Cells**: No known significant effects or critical hazards.
- **pUC 18 DNA Control Plasmid**: No known significant effects or critical hazards.

Mutagenicity:

- **StrataClone SoloPack Competent Cells**: No known significant effects or critical hazards.
- **pUC 18 DNA Control Plasmid**: No known significant effects or critical hazards.

Teratogenicity:

- **StrataClone SoloPack Competent Cells**: No known significant effects or critical hazards.
- **pUC 18 DNA Control Plasmid**: No known significant effects or critical hazards.

Developmental effects:

- **StrataClone SoloPack Competent Cells**: No known significant effects or critical hazards.
- **pUC 18 DNA Control Plasmid**: No known significant effects or critical hazards.

Fertility effects:

- **StrataClone SoloPack Competent Cells**: No known significant effects or critical hazards.
- **pUC 18 DNA Control Plasmid**: No known significant effects or critical hazards.

SECTION 12: Ecological information

12.1 Toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>StrataClone SoloPack</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competent Cells</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calcium chloride (CaCl2),</td>
<td>Acute EC50 2900 mg/l Fresh</td>
<td>Algae</td>
<td>72 hours</td>
</tr>
<tr>
<td>dihydrate</td>
<td>water</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute NOEC 2000 mg/l Fresh</td>
<td>Daphnia</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>water</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12.2 Persistence and degradability

Not available.
SECTION 12: Ecological information

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
This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

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

<table>
<thead>
<tr>
<th>14.1 UN number</th>
<th>ADR/RID</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.2 UN proper shipping name</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>14.3 Transport hazard class(es)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>14.4 Packing group</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>14.5 Environmental hazards</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
</tr>
</tbody>
</table>

Additional information

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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
  - 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
  - StrataClone SoloPack Competent Cells: Not applicable.
  - pUC 18 DNA Control Plasmid: 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
- 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): Not determined.
  - Japan inventory (ISHL): Not determined.

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SECTION 15: Regulatory information

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

| StrataClone SoloPack Competent Cells H319 | Causes serious eye irritation. |

Full text of classifications [CLP/GHS]

| StrataClone SoloPack Competent Cells Eye Irrit. 2, H319 | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 |

Date of issue/ Date of revision : 16/04/2019
Date of previous issue : 28/12/2017
Version : 2

Notice to reader

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