Conforms to US OSHA Hazard Communication 29CFR1910.1200

# SAFETY DATA SHEET

Agilent Technologies

BJ5183 Electroporation Competent Cells, Part Number 200154

## Section 1. Identification

### 1.1 Product identifier

**Product name** : BJ5183 Electroporation Competent Cells, Part Number 200154

**Part no. (chemical kit)** : 200154

**Part no.** : BJ5183 electroporation competent cells 200154-41
pUC 18 DNA Control Plasmid 200231-42

**Validation date** : 10/4/2023

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

**Identified uses** : Analytical reagent.

BJ5183 electroporation competent cells 0.5 ml
pUC 18 DNA Control Plasmid 0.01 ml (0.1 ng / µl)

### 1.3 Details of the supplier of the safety data sheet

**Supplier/Manufacturer** : Agilent Technologies, Inc.
5301 Stevens Creek Blvd
Santa Clara, CA 95051, USA
800-227-9770

### 1.4 Emergency telephone number

**In case of emergency** : CHEMTREC®: 1-800-424-9300

## Section 2. Hazards identification

### 2.1 Classification of the substance or mixture

**OSHA/HCS status** :

| | |
|---|---|
| BJ5183 electroporation competent cells | While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product. |
| pUC 18 DNA Control Plasmid | While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product. |

**Classification of the substance or mixture**

Not classified.

| | |
|---|---|
| BJ5183 electroporation competent cells | Percentage of the mixture consisting of ingredient (s) of unknown hazards to the aquatic environment: 2.3% |

### 2.2 GHS label elements

| | | |
|---|---|---|
| **Signal word** : | BJ5183 electroporation competent cells | No signal word. |
| | pUC 18 DNA Control Plasmid | No signal word. |
| **Hazard statements** : | BJ5183 electroporation competent cells | No known significant effects or critical hazards. |
| | pUC 18 DNA Control Plasmid | No known significant effects or critical hazards. |

# Section 2. Hazards identification

## Precautionary statements

| | | | |
|---|---|---|---|
| **Prevention** | : | BJ5183 electroporation competent cells | Not applicable. |
| | | pUC 18 DNA Control Plasmid | Not applicable. |
| **Response** | : | BJ5183 electroporation competent cells | Not applicable. |
| | | pUC 18 DNA Control Plasmid | Not applicable. |
| **Storage** | : | BJ5183 electroporation competent cells | Not applicable. |
| | | pUC 18 DNA Control Plasmid | Not applicable. |
| **Disposal** | : | BJ5183 electroporation competent cells | Not applicable. |
| | | pUC 18 DNA Control Plasmid | Not applicable. |
| **Supplemental label elements** | : | BJ5183 electroporation competent cells | None known. |
| | | pUC 18 DNA Control Plasmid | None known. |

## 2.3 Other hazards

| | | | |
|---|---|---|---|
| **Hazards not otherwise classified** | : | BJ5183 electroporation competent cells | None known. |
| | | pUC 18 DNA Control Plasmid | None known. |

# Section 3. Composition/information on ingredients

| | | | |
|---|---|---|---|
| **Substance/mixture** | : | BJ5183 electroporation competent cells | Mixture |
| | | pUC 18 DNA Control Plasmid | Mixture |

| Ingredient name | % | CAS number |
|---|---|---|
| **BJ5183 electroporation competent cells** | | |
| Glycerol | <10 | 56-81-5 |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.**

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

# Section 4. First aid measures

## 4.1 Description of necessary first aid measures

| | | | |
|---|---|---|---|
| **Eye contact** | : | BJ5183 electroporation competent cells | 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. |
| | | 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** | : | BJ5183 electroporation competent cells | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. |
| | | 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. |

# Section 4. First aid measures

| | | | |
|---|---|---|---|
| **Skin contact** | : | BJ5183 electroporation competent cells | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. |
| | | pUC 18 DNA Control Plasmid | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. |
| **Ingestion** | : | BJ5183 electroporation competent cells | Wash out mouth with water. 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. |
| | | pUC 18 DNA Control Plasmid | Wash out mouth with water. 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. |

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

### Potential acute health effects

| | | | |
|---|---|---|---|
| **Eye contact** | : | BJ5183 electroporation competent cells | No known significant effects or critical hazards. |
| | | pUC 18 DNA Control Plasmid | No known significant effects or critical hazards. |
| **Inhalation** | : | BJ5183 electroporation competent cells | No known significant effects or critical hazards. |
| | | pUC 18 DNA Control Plasmid | No known significant effects or critical hazards. |
| **Skin contact** | : | BJ5183 electroporation competent cells | No known significant effects or critical hazards. |
| | | pUC 18 DNA Control Plasmid | No known significant effects or critical hazards. |
| **Ingestion** | : | BJ5183 electroporation competent cells | No known significant effects or critical hazards. |
| | | pUC 18 DNA Control Plasmid | No known significant effects or critical hazards. |

### Over-exposure signs/symptoms

| | | | |
|---|---|---|---|
| **Eye contact** | : | BJ5183 electroporation competent cells | No specific data. |
| | | pUC 18 DNA Control Plasmid | No specific data. |
| **Inhalation** | : | BJ5183 electroporation competent cells | No specific data. |
| | | pUC 18 DNA Control Plasmid | No specific data. |
| **Skin contact** | : | BJ5183 electroporation competent cells | No specific data. |
| | | pUC 18 DNA Control Plasmid | No specific data. |
| **Ingestion** | : | BJ5183 electroporation competent cells | No specific data. |
| | | pUC 18 DNA Control Plasmid | No specific data. |

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

| | | | |
|---|---|---|---|
| **Notes to physician** | : | BJ5183 electroporation competent cells | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| | | pUC 18 DNA Control Plasmid | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |

# Section 4. First aid measures

| | | | |
|---|---|---|---|
| **Specific treatments** | : | BJ5183 electroporation competent cells | No specific treatment. |
| | | pUC 18 DNA Control Plasmid | No specific treatment. |
| **Protection of first-aiders** | : | BJ5183 electroporation competent cells | No action shall be taken involving any personal risk or without suitable training. |
| | | pUC 18 DNA Control Plasmid | No action shall be taken involving any personal risk or without suitable training. |

**See toxicological information (Section 11)**

# Section 5. Fire-fighting measures

## 5.1 Extinguishing media

| | | | |
|---|---|---|---|
| **Suitable extinguishing media** | : | BJ5183 electroporation competent cells | Use an extinguishing agent suitable for the surrounding fire. |
| | | pUC 18 DNA Control Plasmid | Use an extinguishing agent suitable for the surrounding fire. |
| **Unsuitable extinguishing media** | : | BJ5183 electroporation competent cells | None known. |
| | | pUC 18 DNA Control Plasmid | None known. |

## 5.2 Special hazards arising from the substance or mixture

| | | | |
|---|---|---|---|
| **Specific hazards arising from the chemical** | : | BJ5183 electroporation competent cells | In a fire or if heated, a pressure increase will occur and the container may burst. |
| | | pUC 18 DNA Control Plasmid | In a fire or if heated, a pressure increase will occur and the container may burst. |
| **Hazardous thermal decomposition products** | : | BJ5183 electroporation competent cells | Decomposition products may include the following materials:<br>carbon dioxide<br>carbon monoxide |
| | | pUC 18 DNA Control Plasmid | No specific data. |

## 5.3 Advice for firefighters

| | | | |
|---|---|---|---|
| **Special protective actions for fire-fighters** | : | BJ5183 electroporation competent cells | 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. |
| | | pUC 18 DNA Control 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. |
| **Special protective equipment for fire-fighters** | : | BJ5183 electroporation competent cells | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. |
| | | pUC 18 DNA Control Plasmid | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. |

# Section 6. Accidental release measures

## 6.1 Personal precautions, protective equipment and emergency procedures

| | | | |
|---|---|---|---|
| **For non-emergency personnel** | : | BJ5183 electroporation competent cells | 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 spilled material. Put on appropriate personal protective equipment. |
| | | pUC 18 DNA Control Plasmid | 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 spilled material. Put on appropriate personal protective equipment. |
| **For emergency responders** | : | BJ5183 electroporation competent cells | If specialized 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". |
| | | pUC 18 DNA Control Plasmid | If specialized 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** | : | BJ5183 electroporation competent cells | Avoid dispersal of spilled 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). |
| | | pUC 18 DNA Control Plasmid | Avoid dispersal of spilled 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 materials for containment and cleaning up

| | | | |
|---|---|---|---|
| **Methods for cleaning up** | : | BJ5183 electroporation competent cells | 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. |
| | | pUC 18 DNA Control Plasmid | Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. |

# Section 7. Handling and storage

## 7.1 Precautions for safe handling

| | | | |
|---|---|---|---|
| **Protective measures** | : | BJ5183 electroporation competent cells | Put on appropriate personal protective equipment (see Section 8). |
| | | pUC 18 DNA Control Plasmid | Put on appropriate personal protective equipment (see Section 8). |

# Section 7. Handling and storage

| | | | |
|---|---|---|---|
| **Advice on general occupational hygiene** | : | BJ5183 electroporation competent cells | 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. |
| | | pUC 18 DNA Control Plasmid | 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** | : | BJ5183 electroporation 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 unlabeled 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 unlabeled 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** | : | BJ5183 electroporation competent cells | Industrial applications, Professional applications. |
| | | pUC 18 DNA Control Plasmid | Industrial applications, Professional applications. |
| **Industrial sector specific solutions** | : | BJ5183 electroporation competent cells | Not available. |
| | | pUC 18 DNA Control Plasmid | Not available. |

# Section 8. Exposure controls/personal protection

**8.1 Control parameters**

**Occupational exposure limits**

# Section 8. Exposure controls/personal protection

| Ingredient name | Exposure limits |
|---|---|
| **BJ5183 electroporation competent cells**<br>Glycerol | **OSHA PEL 1989 (United States, 3/1989).**<br>TWA: 5 mg/m³ 8 hours. Form: Respirable fraction<br>TWA: 10 mg/m³ 8 hours. Form: Total dust<br>**OSHA PEL (United States, 5/2018).**<br>TWA: 5 mg/m³ 8 hours. Form: Respirable fraction<br>TWA: 15 mg/m³ 8 hours. Form: Total dust<br>**CAL OSHA PEL (United States, 5/2018).**<br>TWA: 5 mg/m³ 8 hours. Form: respirable fraction<br>TWA: 10 mg/m³ 8 hours. Form: total dust |

**Biological exposure indices**

No exposure indices known.

**8.2 Exposure controls**

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

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

**Individual protection measures**

**Hygiene measures** : 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.

# Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

## Appearance

**Physical state** : BJ5183 electroporation competent cells — Liquid.
pUC 18 DNA Control Plasmid — Liquid.

**Color** : BJ5183 electroporation competent cells — Not available.
pUC 18 DNA Control Plasmid — Not available.

**Odor** : BJ5183 electroporation competent cells — Not available.
pUC 18 DNA Control Plasmid — Not available.

**Odor threshold** : BJ5183 electroporation competent cells — Not available.
pUC 18 DNA Control Plasmid — Not available.

**pH** : BJ5183 electroporation competent cells — Not available.
pUC 18 DNA Control Plasmid — 7.5

**Melting point/freezing point** : BJ5183 electroporation competent cells — Not available.
pUC 18 DNA Control Plasmid — 0°C (32°F)

**Boiling point, initial boiling point, and boiling range** : BJ5183 electroporation competent cells — Not available.
pUC 18 DNA Control Plasmid — 100°C (212°F)

**Flash point** :

| | Closed cup | | | Open cup | | |
|---|---|---|---|---|---|---|
| **Ingredient name** | **°C** | **°F** | **Method** | **°C** | **°F** | **Method** |
| **BJ5183 electroporation competent cells** | | | | | | |
| Glycerol | - | - | - | 177 | 350.6 | - |

**Evaporation rate** : BJ5183 electroporation competent cells — Not available.
pUC 18 DNA Control Plasmid — Not available.

**Flammability** : BJ5183 electroporation competent cells — Not applicable.
pUC 18 DNA Control Plasmid — Not applicable.

**Lower and upper explosion limit/flammability limit** : BJ5183 electroporation competent cells — Not available.
pUC 18 DNA Control Plasmid — Not available.

**Vapor pressure** :

| | Vapor Pressure at 20°C | | | Vapor pressure at 50°C | | |
|---|---|---|---|---|---|---|
| **Ingredient name** | **mm Hg** | **kPa** | **Method** | **mm Hg** | **kPa** | **Method** |
| **BJ5183 electroporation competent cells** | | | | | | |
| water | 17.5 | 2.3 | - | 92.258 | 12.3 | - |
| Glycerol | 0.000075 | 0.00001 | - | 0.0025 | 0.00033 | - |
| **pUC 18 DNA** | | | | | | |

# Section 9. Physical and chemical properties and safety characteristics

| | | | | | | |
|---|---|---|---|---|---|---|
| **Control Plasmid** | | | | | | |
| water | 17.5 | 2.3 | - | 92.258 | 12.3 | - |

**Relative vapor density** : BJ5183 electroporation competent cells — Not available.
pUC 18 DNA Control Plasmid — Not available.

**Relative density** : BJ5183 electroporation competent cells — Not available.
pUC 18 DNA Control Plasmid — Not available.

**Solubility(ies)** :

| Media | Result |
|---|---|
| **BJ5183 electroporation competent cells** | |
| water | Soluble |
| **pUC 18 DNA Control Plasmid** | |
| water | Soluble |

**Partition coefficient: n-octanol/water** : BJ5183 electroporation competent cells — Not applicable.
pUC 18 DNA Control Plasmid — Not applicable.

**Auto-ignition temperature** :

| Ingredient name | °C | °F | Method |
|---|---|---|---|
| **BJ5183 electroporation competent cells** | | | |
| Glycerol | 370 | 698 | - |

**Decomposition temperature** : BJ5183 electroporation competent cells — Not available.
pUC 18 DNA Control Plasmid — Not available.

**Viscosity** : BJ5183 electroporation competent cells — Not available.
pUC 18 DNA Control Plasmid — Not available.

**Particle characteristics**

**Median particle size** : BJ5183 electroporation competent cells — Not applicable.
pUC 18 DNA Control Plasmid — Not applicable.

# Section 10. Stability and reactivity

**10.1 Reactivity** : BJ5183 electroporation competent cells — No specific test data related to reactivity available for this product or its ingredients.
pUC 18 DNA Control Plasmid — No specific test data related to reactivity available for this product or its ingredients.

**10.2 Chemical stability** : BJ5183 electroporation competent cells — The product is stable.
pUC 18 DNA Control Plasmid — The product is stable.

**10.3 Possibility of hazardous reactions** : BJ5183 electroporation competent cells — Under normal conditions of storage and use, hazardous reactions will not occur.
pUC 18 DNA Control Plasmid — Under normal conditions of storage and use, hazardous reactions will not occur.

**10.4 Conditions to avoid** : BJ5183 electroporation competent cells — No specific data.
pUC 18 DNA Control Plasmid — No specific data.

# Section 10. Stability and reactivity

**10.5 Incompatible materials** : BJ5183 electroporation competent cells — May react or be incompatible with oxidizing materials.
pUC 18 DNA Control Plasmid — May react or be incompatible with oxidizing materials.

**10.6 Hazardous decomposition products** : BJ5183 electroporation competent cells — Under normal conditions of storage and use, hazardous decomposition products should not be produced.
pUC 18 DNA Control Plasmid — 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

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---|---|---|---|
| **BJ5183 electroporation competent cells** | | | | |
| Glycerol | LD50 Oral | Rat | 12600 mg/kg | - |

### Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|---|---|---|---|---|---|
| **BJ5183 electroporation competent cells** | | | | | |
| Glycerol | Eyes - Mild irritant | Rabbit | - | 24 hours 500 mg | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 500 mg | - |

### Sensitization

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 the likely routes of exposure** : BJ5183 electroporation competent cells — Not available.
pUC 18 DNA Control Plasmid — Not available.

### Potential acute health effects

# Section 11. Toxicological information

| | | | |
|---|---|---|---|
| **Eye contact** | : | BJ5183 electroporation competent cells | No known significant effects or critical hazards. |
| | | pUC 18 DNA Control Plasmid | No known significant effects or critical hazards. |
| **Inhalation** | : | BJ5183 electroporation competent cells | No known significant effects or critical hazards. |
| | | pUC 18 DNA Control Plasmid | No known significant effects or critical hazards. |
| **Skin contact** | : | BJ5183 electroporation competent cells | No known significant effects or critical hazards. |
| | | pUC 18 DNA Control Plasmid | No known significant effects or critical hazards. |
| **Ingestion** | : | BJ5183 electroporation 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

| | | | |
|---|---|---|---|
| **Eye contact** | : | BJ5183 electroporation competent cells | No specific data. |
| | | pUC 18 DNA Control Plasmid | No specific data. |
| **Inhalation** | : | BJ5183 electroporation competent cells | No specific data. |
| | | pUC 18 DNA Control Plasmid | No specific data. |
| **Skin contact** | : | BJ5183 electroporation competent cells | No specific data. |
| | | pUC 18 DNA Control Plasmid | No specific data. |
| **Ingestion** | : | BJ5183 electroporation competent cells | No specific data. |
| | | pUC 18 DNA Control Plasmid | No specific data. |

## Delayed and immediate effects and also 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** | : | BJ5183 electroporation competent cells | No known significant effects or critical hazards. |
| | | pUC 18 DNA Control Plasmid | No known significant effects or critical hazards. |
| **Carcinogenicity** | : | BJ5183 electroporation competent cells | No known significant effects or critical hazards. |
| | | pUC 18 DNA Control Plasmid | No known significant effects or critical hazards. |
| **Mutagenicity** | : | BJ5183 electroporation competent cells | No known significant effects or critical hazards. |
| | | pUC 18 DNA Control Plasmid | No known significant effects or critical hazards. |
| **Reproductive toxicity** | : | BJ5183 electroporation competent cells | No known significant effects or critical hazards. |
| | | pUC 18 DNA Control Plasmid | No known significant effects or critical hazards. |

## Numerical measures of toxicity

### Acute toxicity estimates

# Section 11. Toxicological information

| Product/ingredient name | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapors) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|---|---|---|---|---|---|
| **BJ5183 electroporation competent cells**<br>Glycerol | 12600 | N/A | N/A | N/A | N/A |

# Section 12. Ecological information

## 12.1 Toxicity

| Product/ingredient name | Result | Species | Exposure |
|---|---|---|---|
| **BJ5183 electroporation competent cells**<br>Glycerol | Acute LC50 54000 mg/l Fresh water | Fish - *Oncorhynchus mykiss* | 96 hours |

## 12.2 Persistence and degradability

| Product/ingredient name | Test | Result | Dose | Inoculum |
|---|---|---|---|---|
| **BJ5183 electroporation competent cells**<br>Glycerol | 301D Ready Biodegradability - Closed Bottle Test | 93 % - 30 days | - | - |

**Conclusion/Summary** : Not available.

## 12.3 Bioaccumulative potential

| Product/ingredient name | $LogP_{ow}$ | BCF | Potential |
|---|---|---|---|
| **BJ5183 electroporation competent cells**<br>Glycerol | -1.76 | - | Low |

## 12.4 Mobility in soil

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

**12.5 Other adverse effects** : No known significant effects or critical hazards.

# Section 13. Disposal considerations

## 13.1 Waste treatment methods

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.**

**The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.**

**Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.**

## Section 14. Transport information

**DOT / TDG / Mexico / IMDG / IATA** : Not regulated.

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

**Transport in bulk according to IMO instruments** : Not available.

## Section 15. Regulatory information

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

**U.S. Federal regulations** : **TSCA 8(a) CDR Exempt/Partial exemption**: Not determined

**Clean Water Act (CWA) 311**: Edetic acid

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Not listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

**SARA 302/304**

**Composition/information on ingredients**

No products were found.

**SARA 304 RQ** : Not applicable.

# Section 15. Regulatory information

## SARA 311/312

**Classification** : BJ5183 electroporation competent cells — Not applicable.
pUC 18 DNA Control Plasmid — Not applicable.

## Composition/information on ingredients

| Name | % | Classification |
|---|---|---|
| **BJ5183 electroporation competent cells** | | |
| Glycerol | <10 | EYE IRRITATION - Category 2B |

## State regulations

**Massachusetts** : The following components are listed: GLYCERINE MIST

**New York** : None of the components are listed.

**New Jersey** : The following components are listed: GLYCERIN

**Pennsylvania** : The following components are listed: 1,2,3-PROPANETRIOL

## California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

## International regulations

### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

### Montreal Protocol

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.

**Japan** : **Japan inventory (CSCL)**: All components are listed or exempted.
**Japan inventory (ISHL)**: All components are listed or exempted.

**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 active or exempted.

**Viet Nam** : All components are listed or exempted.

# Section 16. Other information

## Procedure used to derive the classification

| Classification | Justification |
|---|---|
| Not classified. | |

## History

**Date of issue/Date of revision** : 10/04/2023

**Date of previous issue** : 08/19/2020

**Version** : 7

**Key to abbreviations** : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
UN = United Nations

**Indicates information that has changed from previously issued version.**

## Notice to reader

**Disclaimer: The information contained in this document is based on Agilent's state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.**