

SAFETY DATA SHEET



ABLE K Electroporation-Competent Cells, Part Number 200162

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

1.1 Product identifier

| | | |
|-----------------------|---|--|
| Product name | : | ABLE K Electroporation-Competent Cells, Part Number 200162 |
| Part No. (Kit) | : | 200162 |
| Part No. | : | ABLE K electroporation competent cells 200162-41 |
| | | pUC 18 DNA Control Plasmid 200231-42 |

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

| Identified uses | |
|--|---------------------|
| Analytical reagent. | |
| ABLE K electroporation competent cells | 5 x 0.1 ml |
| 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 | : | ABLE K electroporation competent cells Mixture |
| | | pUC 18 DNA Control Plasmid Mixture |

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Not classified.

Ingredients of unknown toxicity : ABLE K electroporation competent cells Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 10 - 30%

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 | : | ABLE K electroporation competent cells No signal word. |
| | | pUC 18 DNA Control Plasmid No signal word. |

Date of issue/Date of revision : 27/11/2017

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SECTION 2: Hazards identification

Hazard statements : ABLE K electroporation competent cells No known significant effects or critical hazards.
 pUC 18 DNA Control No known significant effects or critical hazards.
 Plasmid

Precautionary statements

Prevention : ABLE K electroporation competent cells Not applicable.
 pUC 18 DNA Control Not applicable.
 Plasmid

Response : ABLE K electroporation competent cells Not applicable.
 pUC 18 DNA Control Not applicable.
 Plasmid

Storage : ABLE K electroporation competent cells Not applicable.
 pUC 18 DNA Control Not applicable.
 Plasmid

Disposal : ABLE K electroporation competent cells Not applicable.
 pUC 18 DNA Control Not applicable.
 Plasmid

Supplemental label elements : ABLE K electroporation competent cells Not applicable.
 pUC 18 DNA Control Not applicable.
 Plasmid

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : ABLE K electroporation competent cells Not applicable.
 pUC 18 DNA Control Not applicable.
 Plasmid

Special packaging requirements

Tactile warning of danger : ABLE K electroporation competent cells Not applicable.
 pUC 18 DNA Control Not applicable.
 Plasmid

2.3 Other hazards

Other hazards which do not result in classification : ABLE K electroporation competent cells None known.
 pUC 18 DNA Control None known.
 Plasmid

SECTION 3: Composition/information on ingredients

3.1 Substances : ABLE K electroporation competent cells Mixture
 pUC 18 DNA Control Plasmid Mixture

| Product/ingredient name | Identifiers | % | Regulation (EC) No. 1272/2008 [CLP] | Type |
|--|---|-----|-------------------------------------|------|
| ABLE K electroporation competent cells Glycerol | REACH #: Annex V EC: 200-289-5 CAS: 56-81-5 | ≤10 | Not classified. | [2] |

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SECTION 3: Composition/information on ingredients

| | | | | |
|--|--|--|---|--|
| | | | See Section 16 for the full text of the H statements declared above. | |
|--|--|--|---|--|

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [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 | : ABLE K electroporation 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. 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 | : ABLE K electroporation 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. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. |
| Skin contact | : ABLE K electroporation 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. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. |
| Ingestion | : ABLE K electroporation 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. 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 | : ABLE K electroporation competent cells pUC 18 DNA Control Plasmid | No action shall be taken involving any personal risk or without suitable training. 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 | : ABLE K electroporation competent cells pUC 18 DNA Control Plasmid | No known significant effects or critical hazards. No known significant effects or critical hazards. |
|--------------------|--|--|

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SECTION 4: First aid measures

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

Over-exposure signs/symptoms

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

4.3 Indication of any immediate medical attention and special treatment needed

| | | |
|----------------------------|---|--|
| Notes to physician | : ABLE K electroporation competent cells pUC 18 DNA Control Plasmid | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| Specific treatments | : ABLE K electroporation competent cells pUC 18 DNA Control Plasmid | No specific treatment. No specific treatment. |

SECTION 5: Firefighting measures

5.1 Extinguishing media

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

5.2 Special hazards arising from the substance or mixture

| | | |
|--|---|--|
| Hazards from the substance or mixture | : ABLE K electroporation competent cells pUC 18 DNA Control Plasmid | In a fire or if heated, a pressure increase will occur and the container may burst. In a fire or if heated, a pressure increase will occur and the container may burst. |
|--|---|--|

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SECTION 5: Firefighting measures

Hazardous combustion products : ABLE K electroporation competent cells Decomposition products may include the following materials:

carbon dioxide
carbon monoxide
No specific data.

pUC 18 DNA Control Plasmid

5.3 Advice for firefighters

Special precautions for fire-fighters : ABLE K 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

Special protective equipment for fire-fighters : ABLE K 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. 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.

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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : ABLE K 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 spilt 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 spilt material. Put on appropriate personal protective equipment.

For emergency responders : ABLE K electroporation competent cells 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".

pUC 18 DNA Control Plasmid

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 : ABLE K electroporation competent cells 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).

pUC 18 DNA Control Plasmid

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

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SECTION 6: Accidental release measures

| | | |
|--|---|---|
| Methods for cleaning up | : ABLE K 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. |
| 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 | : ABLE K 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). |
| Advice on general occupational hygiene | : ABLE K 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

| | | |
|----------------|--|---|
| Storage | : ABLE K 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 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)

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SECTION 7: Handling and storage

| | | | |
|---|---|--|---|
| Recommendations | : | ABLE K electroporation competent cells | Industrial applications, Professional applications. |
| | | pUC 18 DNA Control Plasmid | Industrial applications, Professional applications. |
| Industrial sector specific solutions | : | ABLE K electroporation competent cells | Not applicable. |
| | | pUC 18 DNA Control Plasmid | Not applicable. |

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

| Product/ingredient name | Exposure limit values |
|--|--|
| ABLE K electroporation competent cells Glycerol | EH40/2005 WELs (United Kingdom (UK), 12/2011). TWA: 10 mg/m ³ 8 hours. Form: Mist |

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

DNELs/DMELs

No DNELs/DMELs available.

PNECs

No PNECs available

8.2 Exposure controls

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

Individual protection measures

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.

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SECTION 8: Exposure controls/personal protection

- 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** : ABLE K electroporation competent cells Liquid.
pUC 18 DNA Control Liquid.
Plasmid
- Colour** : ABLE K electroporation competent cells Not available.
pUC 18 DNA Control Not available.
Plasmid
- Odour** : ABLE K electroporation competent cells Not available.
pUC 18 DNA Control Not available.
Plasmid
- Odour threshold** : ABLE K electroporation competent cells Not available.
pUC 18 DNA Control Not available.
Plasmid
- pH** : ABLE K electroporation competent cells Not available.
pUC 18 DNA Control 7.5
Plasmid
- Melting point/freezing point** : ABLE K electroporation competent cells Not available.
pUC 18 DNA Control 0°C
Plasmid
- Initial boiling point and boiling range** : ABLE K electroporation competent cells Not available.
pUC 18 DNA Control 100°C
Plasmid
- Flash point** : ABLE K electroporation competent cells Not available.
pUC 18 DNA Control Not available.
Plasmid
- Evaporation rate** : ABLE K electroporation competent cells Not available.
pUC 18 DNA Control Not available.
Plasmid

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SECTION 9: Physical and chemical properties

| | | |
|---|--|---|
| Flammability (solid, gas) | : ABLE K electroporation competent cells pUC 18 DNA Control Plasmid | Not applicable. Not applicable. |
| Upper/lower flammability or explosive limits | : ABLE K electroporation competent cells pUC 18 DNA Control Plasmid | Not available. Not available. |
| Vapour pressure | : ABLE K electroporation competent cells pUC 18 DNA Control Plasmid | Not available. Not available. |
| Vapour density | : ABLE K electroporation competent cells pUC 18 DNA Control Plasmid | Not available. Not available. |
| Relative density | : ABLE K electroporation competent cells pUC 18 DNA Control Plasmid | Not available. Not available. |
| Solubility(ies) | : ABLE K electroporation competent cells pUC 18 DNA Control Plasmid | Soluble in the following materials: cold water and hot water. Easily soluble in the following materials: cold water and hot water. |
| Partition coefficient: n-octanol/water | : ABLE K electroporation competent cells pUC 18 DNA Control Plasmid | Not available. Not available. |
| Auto-ignition temperature | : ABLE K electroporation competent cells pUC 18 DNA Control Plasmid | Not available. Not available. |
| Decomposition temperature | : ABLE K electroporation competent cells pUC 18 DNA Control Plasmid | Not available. Not available. |
| Viscosity | : ABLE K electroporation competent cells pUC 18 DNA Control Plasmid | Not available. Not available. |
| Explosive properties | : ABLE K electroporation competent cells pUC 18 DNA Control Plasmid | Not available. Not available. |
| Oxidising properties | : ABLE K electroporation competent cells pUC 18 DNA Control Plasmid | Not available. Not available. |

9.2 Other information

No additional information.

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SECTION 10: Stability and reactivity

| | | |
|--|---|--|
| 10.1 Reactivity | : ABLE K electroporation competent cells pUC 18 DNA Control Plasmid | No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. |
| 10.2 Chemical stability | : ABLE K electroporation competent cells pUC 18 DNA Control Plasmid | The product is stable. The product is stable. |
| 10.3 Possibility of hazardous reactions | : ABLE K electroporation competent cells pUC 18 DNA Control Plasmid | Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. |
| 10.4 Conditions to avoid | : ABLE K electroporation competent cells pUC 18 DNA Control Plasmid | No specific data. No specific data. |
| 10.5 Incompatible materials | : ABLE K electroporation competent cells pUC 18 DNA Control Plasmid | May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. |
| 10.6 Hazardous decomposition products | : ABLE K electroporation competent cells pUC 18 DNA Control Plasmid | Under normal conditions of storage and use, hazardous decomposition products should not be produced. 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

Not available.

Irritation/Corrosion

Conclusion/Summary : Not available.

Sensitiser

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure

: ABLE K electroporation competent cells
pUC 18 DNA Control
Plasmid

Routes of entry anticipated: Oral, Dermal, Inhalation.
Not available.

Potential acute health effects

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SECTION 11: Toxicological information

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

Symptoms related to the physical, chemical and toxicological characteristics

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

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

Short term exposure

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

Long term exposure

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

Potential chronic health effects

| | | |
|------------------------|---|--|
| General | : ABLE K electroporation competent cells pUC 18 DNA Control Plasmid | No known significant effects or critical hazards. No known significant effects or critical hazards. |
| Carcinogenicity | : ABLE K electroporation competent cells pUC 18 DNA Control Plasmid | No known significant effects or critical hazards. No known significant effects or critical hazards. |

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SECTION 11: Toxicological information

| | | |
|------------------------------|--|---|
| Mutagenicity | : ABLE K electroporation competent cells | No known significant effects or critical hazards. |
| | pUC 18 DNA Control | No known significant effects or critical hazards. |
| | Plasmid | |
| Teratogenicity | : ABLE K electroporation competent cells | No known significant effects or critical hazards. |
| | pUC 18 DNA Control | No known significant effects or critical hazards. |
| | Plasmid | |
| Developmental effects | : ABLE K electroporation competent cells | No known significant effects or critical hazards. |
| | pUC 18 DNA Control | No known significant effects or critical hazards. |
| | Plasmid | |
| Fertility effects | : ABLE K electroporation competent cells | No known significant effects or critical hazards. |
| | pUC 18 DNA Control | No known significant effects or critical hazards. |
| | Plasmid | |
| Other information | : ABLE K electroporation competent cells | Not available. |
| | pUC 18 DNA Control | Not available. |
| | Plasmid | |

SECTION 12: Ecological information

12.1 Toxicity

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Not available.

12.3 Bioaccumulative potential

Not available.

12.4 Mobility in soil

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

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

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

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

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SECTION 13: Disposal considerations

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

ADR/RID / IMDG / IATA : Not regulated.

Additional information

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

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code : Not available.

SECTION 15: Regulatory information

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

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

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : ABLE K electroporation 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)

Date of issue/Date of revision : 27/11/2017

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SECTION 15: Regulatory information

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]

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

Full text of abbreviated H statements

Not applicable.

Full text of classifications [CLP/GHS]

Not applicable.

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Notice to reader

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