SAFETY DATA SHEET
QuikChange HT Mutagenesis Library and Primers, Part Number 5190-7454

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

1.1 Product identifier
Product name: QuikChange HT Mutagenesis Library and Primers, Part Number 5190-7454
Part no. (chemical kit): 5190-7454
Part no.: QuikChange HT Mutagenesis Sublibrary Primers
Mutagenesis Library 5190-7530

1.2 Relevant identified uses of the substance or mixture and uses advised against
Material uses: Analytical reagent.
QuikChange HT Mutagenesis Sublibrary Primers
< 20 ml (Various)
Mutagenesis Library 0.035 ml

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: QuikChange HT Mutagenesis Sublibrary Primers
Mutagenesis Library Mixture

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

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

2.2 Label elements
Signal word: QuikChange HT Mutagenesis Sublibrary Primers
Mutagenesis Library No signal word.

Date of issue/Date of revision: 30/10/2019  Date of previous issue: 26/09/2017  Version: 2
SECTION 2: Hazards identification

Hazard statements:
QuikChange HT Mutagenesis Sublibrary Primers: No known significant effects or critical hazards.
Mutagenesis Library: No known significant effects or critical hazards.

Precautionary statements:
Prevention:
QuikChange HT Mutagenesis Sublibrary Primers: Not applicable.
Mutagenesis Library: Not applicable.

Response:
QuikChange HT Mutagenesis Sublibrary Primers: Not applicable.
Mutagenesis Library: Not applicable.

Storage:
QuikChange HT Mutagenesis Sublibrary Primers: Not applicable.
Mutagenesis Library: Not applicable.

Disposal:
QuikChange HT Mutagenesis Sublibrary Primers: Not applicable.
Mutagenesis Library: Not applicable.

Supplemental label elements:
QuikChange HT Mutagenesis Sublibrary Primers: Not applicable.
Mutagenesis Library: Not applicable.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles:
QuikChange HT Mutagenesis Sublibrary Primers: Not applicable.
Mutagenesis Library: Not applicable.

Special packaging requirements:
Tactile warning of danger:
QuikChange HT Mutagenesis Sublibrary Primers: Not applicable.
Mutagenesis Library: Not applicable.

2.3 Other hazards
Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII:
QuikChange HT Mutagenesis Sublibrary Primers: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
Mutagenesis Library: 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:
QuikChange HT Mutagenesis Sublibrary Primers: None known.
Mutagenesis Library: None known.

SECTION 3: Composition/information on ingredients

3.1 Substances:
QuikChange HT Mutagenesis Sublibrary Primers: Mixture
Mutagenesis Library: Mixture

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

Occupational exposure limits, if available, are listed in Section 8.
SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact : QuikChange HT Mutagenesis Sublibrary Primers
Mutagenesis Library
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.

Eye contact : QuikChange HT Mutagenesis Sublibrary Primers
Mutagenesis Library
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 : QuikChange HT Mutagenesis Sublibrary Primers
Mutagenesis Library
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Inhalation : QuikChange HT Mutagenesis Sublibrary Primers
Mutagenesis Library
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Skin contact : QuikChange HT Mutagenesis Sublibrary Primers
Mutagenesis Library
Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Skin contact : QuikChange HT Mutagenesis Sublibrary Primers
Mutagenesis Library
Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Ingestion : QuikChange HT Mutagenesis Sublibrary Primers
Mutagenesis Library
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.

Ingestion : QuikChange HT Mutagenesis Sublibrary Primers
Mutagenesis Library
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 : QuikChange HT Mutagenesis Sublibrary Primers
Mutagenesis Library
No action shall be taken involving any personal risk or without suitable training.

Protection of first-aiders : QuikChange HT Mutagenesis Sublibrary Primers
Mutagenesis Library
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 : QuikChange HT Mutagenesis Sublibrary Primers
Mutagenesis Library
No known significant effects or critical hazards.

Eye contact : QuikChange HT Mutagenesis Sublibrary Primers
Mutagenesis Library
No known significant effects or critical hazards.

Inhalation : QuikChange HT Mutagenesis Sublibrary Primers
Mutagenesis Library
No known significant effects or critical hazards.

Inhalation : QuikChange HT Mutagenesis Sublibrary Primers
Mutagenesis Library
No known significant effects or critical hazards.

Skin contact : QuikChange HT Mutagenesis Sublibrary Primers
Mutagenesis Library
No known significant effects or critical hazards.

Skin contact : QuikChange HT Mutagenesis Sublibrary Primers
Mutagenesis Library
No known significant effects or critical hazards.

Ingestion : QuikChange HT Mutagenesis Sublibrary Primers
Mutagenesis Library
No known significant effects or critical hazards.

Ingestion : QuikChange HT Mutagenesis Sublibrary Primers
Mutagenesis Library
No known significant effects or critical hazards.

Over-exposure signs/symptoms
SECTION 4: First aid measures

### Eye contact
- **QuikChange HT Mutagenesis Sublibrary Primers**
- **Mutagenesis Library**: No specific data.

### Inhalation
- **QuikChange HT Mutagenesis Sublibrary Primers**
- **Mutagenesis Library**: No specific data.

### Skin contact
- **QuikChange HT Mutagenesis Sublibrary Primers**
- **Mutagenesis Library**: No specific data.

### Ingestion
- **QuikChange HT Mutagenesis Sublibrary Primers**
- **Mutagenesis Library**: No specific data.

#### Specific treatments
- **QuikChange HT Mutagenesis Sublibrary Primers**
- **Mutagenesis Library**: No specific treatment.

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

**Notes to physician**
- **QuikChange HT Mutagenesis Sublibrary Primers**
- **Mutagenesis Library**: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media
- **Suitable extinguishing media**
  - **QuikChange HT Mutagenesis Sublibrary Primers**
  - **Mutagenesis Library**: Use an extinguishing agent suitable for the surrounding fire.
- **Unsuitable extinguishing media**
  - **QuikChange HT Mutagenesis Sublibrary Primers**
  - **Mutagenesis Library**: None known.

#### 5.2 Special hazards arising from the substance or mixture
- **Hazardous combustion products**
  - **QuikChange HT Mutagenesis Sublibrary Primers**
  - **Mutagenesis Library**: In a fire or if heated, a pressure increase will occur and the container may burst.

#### 5.3 Advice for firefighters
- **Special precautions for fire-fighters**
  - **QuikChange HT Mutagenesis Sublibrary Primers**
  - **Mutagenesis Library**: 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. 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.
SECTION 5: Firefighting measures

Special protective equipment for fire-fighters

- QuikChange HT Mutagenesis Sublibrary Primers
- Mutagenesis Library

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

- QuikChange HT Mutagenesis Sublibrary Primers
- Mutagenesis Library

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

- QuikChange HT Mutagenesis Sublibrary Primers
- Mutagenesis Library

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

- QuikChange HT Mutagenesis Sublibrary Primers
- Mutagenesis Library

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and material for containment and cleaning up

Methods for cleaning up

- QuikChange HT Mutagenesis Sublibrary Primers
- Mutagenesis Library

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:
- QuikChange HT Mutagenesis Sublibrary Primers
- Mutagenesis Library

Advice on general occupational hygiene:
- QuikChange HT Mutagenesis Sublibrary Primers
- Mutagenesis Library

7.2 Conditions for safe storage, including any incompatibilities

Storage:
- QuikChange HT Mutagenesis Sublibrary Primers
- Mutagenesis Library

7.3 Specific end use(s)

Recommendations:
- QuikChange HT Mutagenesis Sublibrary Primers
- Mutagenesis Library

Industrial sector specific solutions:
- QuikChange HT Mutagenesis Sublibrary Primers
- Mutagenesis Library
SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits
No exposure limit value known.

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

DNELs/DMELs
No DNELs/DMELs available.

PNECs
No PNECs available

8.2 Exposure controls

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

Individual protection measures

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

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

Skin protection

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

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

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

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

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

**Appearance**

<table>
<thead>
<tr>
<th>Property</th>
<th>QuikChange HT Mutagenesis Sublibrary Primers</th>
<th>Mutagenesis Library</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid.</td>
<td>Liquid.</td>
</tr>
<tr>
<td>Colour</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Odour</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

**Vapour pressure** : Not available.

**Vapour density** : Not available.

**Relative density** : Not available.

**Odour threshold** : Not available.

**pH** : 8

**Melting point/freezing point**

<table>
<thead>
<tr>
<th>Property</th>
<th>QuikChange HT Mutagenesis Sublibrary Primers</th>
<th>Mutagenesis Library</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point/freezing point</td>
<td>0°C</td>
<td>0°C</td>
</tr>
</tbody>
</table>

**Initial boiling point and boiling range**

<table>
<thead>
<tr>
<th>Property</th>
<th>QuikChange HT Mutagenesis Sublibrary Primers</th>
<th>Mutagenesis Library</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial boiling point and boiling range</td>
<td>100°C</td>
<td>100°C</td>
</tr>
</tbody>
</table>

**Flash point** : Not available.

**Evaporation rate** : Not available.

**Flammability (solid, gas)** : Not applicable.

**Upper/lower flammability or explosive limits** : Not available.
SECTION 9: Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>QuikChange HT Mutagenesis Sublibrary Primers</th>
<th>QuikChange HT Mutagenesis Library</th>
<th>Mutagenesis Library</th>
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<tbody>
<tr>
<td>Solubility(ies)</td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
<td></td>
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<tr>
<td>Auto-ignition temperature</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
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</tbody>
</table>

9.2 Other information
No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity : QuikChange HT Mutagenesis Sublibrary Primers Mutagenesis Library
No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : QuikChange HT Mutagenesis Sublibrary Primers Mutagenesis Library
The product is stable.

10.3 Possibility of hazardous reactions : QuikChange HT Mutagenesis Sublibrary Primers Mutagenesis Library
Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : QuikChange HT Mutagenesis Sublibrary Primers Mutagenesis Library
No specific data.
SECTION 10: Stability and reactivity

10.5 Incompatible materials
QuikChange HT Mutagenesis Sublibrary Primers
May react or be incompatible with oxidising materials.
Mutagenesis Library
May react or be incompatible with oxidising materials.

10.6 Hazardous decomposition products
QuikChange HT Mutagenesis Sublibrary Primers
Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Mutagenesis Library
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
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
QuikChange HT Mutagenesis Sublibrary Primers
Not available.
Mutagenesis Library
Not available.

Potential acute health effects

Inhalation
QuikChange HT Mutagenesis Sublibrary Primers
No known significant effects or critical hazards.
Mutagenesis Library
No known significant effects or critical hazards.

Ingestion
QuikChange HT Mutagenesis Sublibrary Primers
No known significant effects or critical hazards.
Mutagenesis Library
No known significant effects or critical hazards.

Skin contact
QuikChange HT Mutagenesis Sublibrary Primers
No known significant effects or critical hazards.
Mutagenesis Library
No known significant effects or critical hazards.
**SECTION 11: Toxicological information**

<table>
<thead>
<tr>
<th>Eye contact</th>
<th>QuikChange HT Mutagenesis Sublibrary Primers</th>
<th>No known significant effects or critical hazards.</th>
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<tbody>
<tr>
<td></td>
<td>Mutagenesis Library</td>
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**Symptoms related to the physical, chemical and toxicological characteristics**

<table>
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<tr>
<th>Inhalation</th>
<th>QuikChange HT Mutagenesis Sublibrary Primers</th>
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<th>Skin contact</th>
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<table>
<thead>
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<th>Eye contact</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Mutagenesis Library</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

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

**Short term exposure**

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

**Long term exposure**

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

**Potential chronic health effects**

<table>
<thead>
<tr>
<th>General</th>
<th>QuikChange HT Mutagenesis Sublibrary Primers</th>
<th>No known significant effects or critical hazards.</th>
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<tr>
<td></td>
<td>Mutagenesis Library</td>
<td>No known significant effects or critical hazards.</td>
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</table>

<table>
<thead>
<tr>
<th>Carcinogenicity</th>
<th>QuikChange HT Mutagenesis Sublibrary Primers</th>
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</thead>
<tbody>
<tr>
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<td>Mutagenesis Library</td>
<td>No known significant effects or critical hazards.</td>
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<table>
<thead>
<tr>
<th>Mutagenicity</th>
<th>QuikChange HT Mutagenesis Sublibrary Primers</th>
<th>No known significant effects or critical hazards.</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Mutagenesis Library</td>
<td>No known significant effects or critical hazards.</td>
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</table>

<table>
<thead>
<tr>
<th>Teratogenicity</th>
<th>QuikChange HT Mutagenesis Sublibrary Primers</th>
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<tbody>
<tr>
<td></td>
<td>Mutagenesis Library</td>
<td>No known significant effects or critical hazards.</td>
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</table>

<table>
<thead>
<tr>
<th>Developmental effects</th>
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<td>Mutagenesis Library</td>
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</table>

<table>
<thead>
<tr>
<th>Fertility effects</th>
<th>QuikChange HT Mutagenesis Sublibrary Primers</th>
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<tbody>
<tr>
<td></td>
<td>Mutagenesis Library</td>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>
SECTION 12: Ecological information

12.1 Toxicity
Conclusion/Summary : Not available.

12.2 Persistence and degradability
Not available.

12.3 Bioaccumulative potential
Not available.

12.4 Mobility in soil
Soil/water partition coefficient (KOC) : 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>
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<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>
</tbody>
</table>

Date of issue/Date of revision : 30/10/2019   Date of previous issue : 26/09/2017   Version : 2   12/14
SECTION 14: Transport information

14.5 Environmental hazards

No. | No. | No.
--- | --- | ---

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

: QuikChange HT Mutagenesis Sublibrary Primers Not applicable.

: QuikChange HT Mutagenesis Library 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 : Not determined.

Canada : Not determined.
SECTION 15: Regulatory information

<table>
<thead>
<tr>
<th>Country</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>All components are listed or exempted.</td>
</tr>
<tr>
<td>Europe</td>
<td>All components are listed or exempted.</td>
</tr>
<tr>
<td>Japan</td>
<td>Japan inventory (ENCS): Not determined.</td>
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<tr>
<td></td>
<td>Japan inventory (ISHL): All components are listed or exempted.</td>
</tr>
<tr>
<td>New Zealand</td>
<td>Not determined.</td>
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<td>Philippines</td>
<td>Not determined.</td>
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<tr>
<td>Republic of Korea</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Taiwan</td>
<td>All components are listed or exempted.</td>
</tr>
<tr>
<td>Thailand</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Turkey</td>
<td>Not determined.</td>
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<tr>
<td>United States</td>
<td>All components are listed or exempted.</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>Not determined.</td>
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</tbody>
</table>

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]
- DMEL = Derived Minimal Effect Level
- DNEL = Derived No Effect Level
- EUH statement = CLP-specific Hazard statement
- N/A = Not available
- PBT = Persistent, Bioaccumulative and Toxic
- PNEC = Predicted No Effect Concentration
- RRN = REACH Registration Number
- vPvB = Very Persistent and Very Bioaccumulative

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

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

Full text of abbreviated H statements
Not applicable.

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

Date of issue/ Date of revision : 30/10/2019
Date of previous issue : 26/09/2017
Version : 2

Notice to reader

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