

# SAFETY DATA SHEET

Lambda DNA Purification Kit, Part Number 200391

## Section 1. Identification

<b>Product identifier</b>	: Lambda DNA Purification Kit, Part Number 200391		
<b>Part no. (chemical kit)</b>	: 200391		
<b>Part no.</b>	: <input checked="" type="checkbox"/>	Lambda DNA Purification Kit RNase A	200391-52
		Lambda DNA Purification Kit DNase I	200391-53
		Lambda DNA Purification Kit Pronase	200391-55
		Lambda DNA Purification Kit 80% DEAE - Cellulose	200391-22
		Lambda DNA Purification Kit CTAB 5%	200391-71
		Lambda DNA Purification Kit 0.5 M EDTA pH=8.0	200391-24
		Lambda DNA Purification Kit NaCl 1.2 M	200391-26
		Lambda DNA Purification Kit	200391-57

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

<b>Material uses</b>	: Analytical reagent.		
	<input checked="" type="checkbox"/>	Lambda DNA Purification Kit RNase A	0.2 ml (200 µl 2 mg/ml)
		Lambda DNA Purification Kit DNase I	0.05 ml (50 µl 20 mg/ml)
		Lambda DNA Purification Kit Pronase	0.77 ml (770 µl 50 mg/ml)
		Lambda DNA Purification Kit 80% DEAE - Cellulose	0.025 ml (25 ml 1.2 M)
		Lambda DNA Purification Kit CTAB 5%	1.5 ml
		Lambda DNA Purification Kit 0.5 M EDTA pH=8.0	2 ml
		Lambda DNA Purification Kit NaCl 1.2 M	10 ml (1.2 M)
		Lambda DNA Purification Kit	0.075 ml (75 µl 20 mg/ml)

**Supplier/Manufacturer** : Agilent Technologies Australia Pty Ltd  
679 Springvale Road  
Mulgrave  
Victoria 3170, Australia  
1800 802 402



**Emergency telephone number (with hours of operation)** : CHEMTREC®: +(61)-290372994

## Section 2. Hazard(s) identification

### Classification of the substance or mixture

<input checked="" type="checkbox"/> Lambda DNA Purification Kit DNase I	
H334	RESPIRATORY SENSITISATION - Category 1
<input checked="" type="checkbox"/> Lambda DNA Purification Kit Pronase	
H334	RESPIRATORY SENSITISATION - Category 1
<input checked="" type="checkbox"/> Lambda DNA Purification Kit 80% DEAE - Cellulose	
H334	RESPIRATORY SENSITISATION - Category 1
<input checked="" type="checkbox"/> Lambda DNA Purification Kit CTAB 5%	
H400	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
H410	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1





## Section 2. Hazard(s) identification

<p>  Lambda DNA Purification Kit RNase A         </p>	<p>Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 1 - 10%</p> <p>Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 1 - 10%</p> <p>Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 1 - 10%</p>
<p>           Lambda DNA Purification Kit DNase I         </p>	<p>Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 1 - 10%</p> <p>Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 1 - 10%</p> <p>Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 1 - 10%</p>
<p>           Lambda DNA Purification Kit Pronase         </p>	<p>Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 1 - 10%</p> <p>Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 1 - 10%</p> <p>Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 1 - 10%</p>
<p>           Lambda DNA Purification Kit 80% DEAE - Cellulose         </p>	<p>Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: &gt; 60%</p> <p>Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: &gt; 60%</p> <p>Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: &gt; 60%</p>
<p>           Lambda DNA Purification Kit CTAB 5%         </p>	<p>Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 1 - 10%</p> <p>Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 1 - 10%</p>
<p>           Lambda DNA Purification Kit NaCl 1.2 M         </p>	<p>Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 1 - 10%</p>
<p>           Lambda DNA Purification Kit         </p>	<p>Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 1 - 10%</p> <p>Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 1 - 10%</p> <p>Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 1 - 10%</p>
<p>  Lambda DNA Purification Kit RNase A         </p>	<p>Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 1.6%</p>
<p>           Lambda DNA Purification Kit DNase I         </p>	<p>Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 2%</p>
<p>           Lambda DNA Purification Kit Pronase         </p>	<p>Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 1.6%</p>
<p>           Lambda DNA Purification Kit 80% DEAE - Cellulose         </p>	<p>Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 80%</p>
<p>           Lambda DNA Purification Kit         </p>	<p>Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 2%</p>

### [GHS label elements](#)

## Section 2. Hazard(s) identification

### Hazard pictograms

: <input checked="" type="checkbox"/> Lambda DNA Purification Kit DNase I	
Lambda DNA Purification Kit Pronase	
Lambda DNA Purification Kit 80% DEAE - Cellulose	
Lambda DNA Purification Kit CTAB 5%	

### Signal word

: <input checked="" type="checkbox"/> Lambda DNA Purification Kit RNase A	No signal word.
Lambda DNA Purification Kit DNase I	DANGER
Lambda DNA Purification Kit Pronase	DANGER
Lambda DNA Purification Kit 80% DEAE - Cellulose	DANGER
Lambda DNA Purification Kit CTAB 5%	WARNING
Lambda DNA Purification Kit 0.5 M EDTA pH=8.0	No signal word.
Lambda DNA Purification Kit NaCl 1.2 M	No signal word.
Lambda DNA Purification Kit	No signal word.

### Hazard statements

: <input checked="" type="checkbox"/> Lambda DNA Purification Kit RNase A	No known significant effects or critical hazards.
Lambda DNA Purification Kit DNase I	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Lambda DNA Purification Kit Pronase	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Lambda DNA Purification Kit 80% DEAE - Cellulose	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Lambda DNA Purification Kit CTAB 5%	H410 - Very toxic to aquatic life with long lasting effects.
Lambda DNA Purification Kit 0.5 M EDTA pH=8.0	No known significant effects or critical hazards.
Lambda DNA Purification Kit NaCl 1.2 M	No known significant effects or critical hazards.
Lambda DNA Purification Kit	No known significant effects or critical hazards.

### Precautionary statements

#### Prevention

: <input checked="" type="checkbox"/> Lambda DNA Purification Kit RNase A	Not applicable.
Lambda DNA Purification Kit DNase I	P285 - In case of inadequate ventilation wear respiratory protection. P261 - Avoid breathing vapour.
Lambda DNA Purification Kit Pronase	P285 - In case of inadequate ventilation wear respiratory protection. P261 - Avoid breathing vapour.
Lambda DNA Purification Kit 80% DEAE - Cellulose	P285 - In case of inadequate ventilation wear respiratory protection. P261 - Avoid breathing vapour.

## Section 2. Hazard(s) identification

	Lambda DNA Purification Kit	P273 - Avoid release to the environment.
	CTAB 5%	
	Lambda DNA Purification Kit	Not applicable.
	0.5 M EDTA pH=8.0	
	Lambda DNA Purification Kit	Not applicable.
	NaCl 1.2 M	
	Lambda DNA Purification Kit	Not applicable.
<b>Response</b>	: Lambda DNA Purification Kit	Not applicable.
	RNase A	
	Lambda DNA Purification Kit	P304 + P341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
	DNase I	P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or physician.
	Lambda DNA Purification Kit	P304 + P341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
	Pronase	P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or physician.
	Lambda DNA Purification Kit	P304 + P341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
	80% DEAE - Cellulose	P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or physician.
	Lambda DNA Purification Kit	P391 - Collect spillage.
	CTAB 5%	
	Lambda DNA Purification Kit	Not applicable.
	0.5 M EDTA pH=8.0	
	Lambda DNA Purification Kit	Not applicable.
	NaCl 1.2 M	
	Lambda DNA Purification Kit	Not applicable.
<b>Storage</b>	: Lambda DNA Purification Kit	Not applicable.
	RNase A	
	Lambda DNA Purification Kit	Not applicable.
	DNase I	
	Lambda DNA Purification Kit	Not applicable.
	Pronase	
	Lambda DNA Purification Kit	Not applicable.
	80% DEAE - Cellulose	
	Lambda DNA Purification Kit	Not applicable.
	CTAB 5%	
	Lambda DNA Purification Kit	Not applicable.
	0.5 M EDTA pH=8.0	
	Lambda DNA Purification Kit	Not applicable.
	NaCl 1.2 M	
	Lambda DNA Purification Kit	Not applicable.
<b>Disposal</b>	: Lambda DNA Purification Kit	Not applicable.
	RNase A	
	Lambda DNA Purification Kit	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	DNase I	
	Lambda DNA Purification Kit	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	Pronase	
	Lambda DNA Purification Kit	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	80% DEAE - Cellulose	
	Lambda DNA Purification Kit	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	CTAB 5%	
	Lambda DNA Purification Kit	Not applicable.
	0.5 M EDTA pH=8.0	

## Section 2. Hazard(s) identification

Lambda DNA Purification Kit Not applicable.  
 NaCl 1.2 M  
 Lambda DNA Purification Kit Not applicable.

### Supplemental label elements

#### Additional warning phrases

:  Lambda DNA Purification Kit Not applicable.  
 RNase A  
 Lambda DNA Purification Kit Not applicable.  
 DNase I  
 Lambda DNA Purification Kit Not applicable.  
 Pronase  
 Lambda DNA Purification Kit Not applicable.  
 80% DEAE - Cellulose  
 Lambda DNA Purification Kit Not applicable.  
 CTAB 5%  
 Lambda DNA Purification Kit Not applicable.  
 0.5 M EDTA pH=8.0  
 Lambda DNA Purification Kit Not applicable.  
 NaCl 1.2 M  
 Lambda DNA Purification Kit Not applicable.

#### Other hazards which do not result in classification

:  Lambda DNA Purification Kit None known.  
 RNase A  
 Lambda DNA Purification Kit None known.  
 DNase I  
 Lambda DNA Purification Kit None known.  
 Pronase  
 Lambda DNA Purification Kit None known.  
 80% DEAE - Cellulose  
 Lambda DNA Purification Kit None known.  
 CTAB 5%  
 Lambda DNA Purification Kit None known.  
 0.5 M EDTA pH=8.0  
 Lambda DNA Purification Kit None known.  
 NaCl 1.2 M  
 Lambda DNA Purification Kit None known.

## Section 3. Composition and ingredient information

### Substance/mixture

:  Lambda DNA Purification Kit Mixture  
 RNase A  
 Lambda DNA Purification Kit Mixture  
 DNase I  
 Lambda DNA Purification Kit Mixture  
 Pronase  
 Lambda DNA Purification Kit Mixture  
 80% DEAE - Cellulose  
 Lambda DNA Purification Kit Mixture  
 CTAB 5%  
 Lambda DNA Purification Kit Mixture  
 0.5 M EDTA pH=8.0  
 Lambda DNA Purification Kit Mixture  
 NaCl 1.2 M  
 Lambda DNA Purification Kit Mixture

### CAS number/other identifiers

## Section 3. Composition and ingredient information

Ingredient name	% (w/w)	CAS number
<b>Lambda DNA Purification Kit DNase I</b> Nuclease, deoxyribo-	≤3	9003-98-9
<b>Lambda DNA Purification Kit Pronase</b> Proteinase, Streptomyces griseus	≤7.6	9036-06-0
<b>Lambda DNA Purification Kit 80% DEAE - Cellulose</b> Phosphatase	≥75 - ≤90	9013-05-2
<b>Lambda DNA Purification Kit CTAB 5%</b> Cetrimonium bromide	≤6.3	57-09-0

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

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

## Section 4. First aid measures

### Description of necessary first aid measures

#### Eye contact

<b>Lambda DNA Purification Kit RNase A</b>	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.
<b>Lambda DNA Purification Kit DNase I</b>	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
<b>Lambda DNA Purification Kit Pronase</b>	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
<b>Lambda DNA Purification Kit 80% DEAE - Cellulose</b>	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
<b>Lambda DNA Purification Kit CTAB 5%</b>	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
<b>Lambda DNA Purification Kit 0.5 M EDTA pH=8.0</b>	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.
<b>Lambda DNA Purification Kit NaCl 1.2 M</b>	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.
<b>Lambda DNA Purification Kit</b>	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

## Section 4. First aid measures

### Inhalation

: Lambda DNA Purification Kit RNase A	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Lambda DNA Purification Kit DNase I	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In the event of any complaints or symptoms, avoid further exposure.
Lambda DNA Purification Kit Pronase	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. In the event of any complaints or symptoms, avoid further exposure.
Lambda DNA Purification Kit 80% DEAE - Cellulose	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In the event of any complaints or symptoms, avoid further exposure.
Lambda DNA Purification Kit CTAB 5%	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery

## Section 4. First aid measures

position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

### Skin contact

Lambda DNA Purification Kit  
0.5 M EDTA pH=8.0  
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Lambda DNA Purification Kit  
NaCl 1.2 M  
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Lambda DNA Purification Kit  
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

: Lambda DNA Purification Kit  
RNase A  
Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Lambda DNA Purification Kit  
DNase I  
Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Lambda DNA Purification Kit  
Pronase  
Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Lambda DNA Purification Kit  
80% DEAE - Cellulose  
Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Lambda DNA Purification Kit  
CTAB 5%  
Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Lambda DNA Purification Kit  
0.5 M EDTA pH=8.0  
Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Lambda DNA Purification Kit  
NaCl 1.2 M  
Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Lambda DNA Purification Kit  
Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

### Ingestion

: Lambda DNA Purification Kit  
RNase A  
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.

Lambda DNA Purification Kit  
DNase I  
Wash out mouth with water. Remove dentures if any. 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. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get



## Section 4. First aid measures

Lambda DNA Purification Kit Pronase	<p>medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.</p> <p>Wash out mouth with water. Remove dentures if any. 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. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.</p>
Lambda DNA Purification Kit 80% DEAE - Cellulose	<p>Wash out mouth with water. Remove dentures if any. 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. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.</p>
Lambda DNA Purification Kit CTAB 5%	<p>Wash out mouth with water. Remove dentures if any. 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. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.</p>
Lambda DNA Purification Kit 0.5 M EDTA pH=8.0	<p>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.</p>
Lambda DNA Purification Kit NaCl 1.2 M	<p>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</p>

## Section 4. First aid measures

Lambda DNA Purification Kit 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.

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

#### Potential acute health effects

##### **Eye contact**

:  Lambda DNA Purification Kit RNase A No known significant effects or critical hazards.

Lambda DNA Purification Kit DNase I No known significant effects or critical hazards.

Lambda DNA Purification Kit Pronase No known significant effects or critical hazards.

Lambda DNA Purification Kit 80% DEAE - Cellulose No known significant effects or critical hazards.

Lambda DNA Purification Kit CTAB 5% No known significant effects or critical hazards.

Lambda DNA Purification Kit 0.5 M EDTA pH=8.0 No known significant effects or critical hazards.

Lambda DNA Purification Kit NaCl 1.2 M No known significant effects or critical hazards.

##### **Inhalation**

:  Lambda DNA Purification Kit RNase A No known significant effects or critical hazards.

Lambda DNA Purification Kit DNase I May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Lambda DNA Purification Kit Pronase May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Lambda DNA Purification Kit 80% DEAE - Cellulose May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Lambda DNA Purification Kit CTAB 5% No known significant effects or critical hazards.

Lambda DNA Purification Kit 0.5 M EDTA pH=8.0 No known significant effects or critical hazards.

Lambda DNA Purification Kit NaCl 1.2 M No known significant effects or critical hazards.

##### **Skin contact**

:  Lambda DNA Purification Kit RNase A No known significant effects or critical hazards.

Lambda DNA Purification Kit DNase I No known significant effects or critical hazards.

Lambda DNA Purification Kit Pronase No known significant effects or critical hazards.

Lambda DNA Purification Kit 80% DEAE - Cellulose No known significant effects or critical hazards.

Lambda DNA Purification Kit CTAB 5% No known significant effects or critical hazards.

Lambda DNA Purification Kit 0.5 M EDTA pH=8.0 No known significant effects or critical hazards.

Lambda DNA Purification Kit NaCl 1.2 M No known significant effects or critical hazards.

## Section 4. First aid measures

- Ingestion**
- : Lambda DNA Purification Kit RNase A No known significant effects or critical hazards.
  - Lambda DNA Purification Kit DNase I No known significant effects or critical hazards.
  - Lambda DNA Purification Kit Pronase No known significant effects or critical hazards.
  - Lambda DNA Purification Kit 80% DEAE - Cellulose No known significant effects or critical hazards.
  - Lambda DNA Purification Kit CTAB 5% No known significant effects or critical hazards.
  - Lambda DNA Purification Kit 0.5 M EDTA pH=8.0 No known significant effects or critical hazards.
  - Lambda DNA Purification Kit NaCl 1.2 M No known significant effects or critical hazards.
  - Lambda DNA Purification Kit No known significant effects or critical hazards.

### Over-exposure signs/symptoms

- Eye contact**
- : Lambda DNA Purification Kit RNase A No specific data.
  - Lambda DNA Purification Kit DNase I No specific data.
  - Lambda DNA Purification Kit Pronase No specific data.
  - Lambda DNA Purification Kit 80% DEAE - Cellulose No specific data.
  - Lambda DNA Purification Kit CTAB 5% No specific data.
  - Lambda DNA Purification Kit 0.5 M EDTA pH=8.0 No specific data.
  - Lambda DNA Purification Kit NaCl 1.2 M No specific data.
  - Lambda DNA Purification Kit No specific data.
- Inhalation**
- : Lambda DNA Purification Kit RNase A No specific data.
  - Lambda DNA Purification Kit DNase I Adverse symptoms may include the following:  
wheezing and breathing difficulties  
asthma
  - Lambda DNA Purification Kit Pronase Adverse symptoms may include the following:  
wheezing and breathing difficulties  
asthma
  - Lambda DNA Purification Kit 80% DEAE - Cellulose Adverse symptoms may include the following:  
wheezing and breathing difficulties  
asthma
  - Lambda DNA Purification Kit CTAB 5% No specific data.
  - Lambda DNA Purification Kit 0.5 M EDTA pH=8.0 No specific data.
  - Lambda DNA Purification Kit NaCl 1.2 M No specific data.
  - Lambda DNA Purification Kit No specific data.
- Skin contact**
- : Lambda DNA Purification Kit RNase A No specific data.
  - Lambda DNA Purification Kit DNase I No specific data.
  - Lambda DNA Purification Kit Pronase No specific data.
  - Lambda DNA Purification Kit 80% DEAE - Cellulose No specific data.
  - Lambda DNA Purification Kit CTAB 5% No specific data.

## Section 4. First aid measures

	Lambda DNA Purification Kit	No specific data.
	0.5 M EDTA pH=8.0	
	Lambda DNA Purification Kit	No specific data.
	NaCl 1.2 M	
	Lambda DNA Purification Kit	No specific data.
<b>Ingestion</b>	: Lambda DNA Purification Kit	No specific data.
	RNase A	
	Lambda DNA Purification Kit	No specific data.
	DNase I	
	Lambda DNA Purification Kit	No specific data.
	Pronase	
	Lambda DNA Purification Kit	No specific data.
	80% DEAE - Cellulose	
	Lambda DNA Purification Kit	No specific data.
	CTAB 5%	
	Lambda DNA Purification Kit	No specific data.
	0.5 M EDTA pH=8.0	
	Lambda DNA Purification Kit	No specific data.
	NaCl 1.2 M	
	Lambda DNA Purification Kit	No specific data.

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

<b>Notes to physician</b>	: Lambda DNA Purification Kit	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
	RNase A	
	Lambda DNA Purification Kit	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	DNase I	
	Lambda DNA Purification Kit	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
	Pronase	
	Lambda DNA Purification Kit	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	80% DEAE - Cellulose	
	Lambda DNA Purification Kit	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
	CTAB 5%	
	Lambda DNA Purification Kit	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	0.5 M EDTA pH=8.0	
	Lambda DNA Purification Kit	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	NaCl 1.2 M	
	Lambda DNA Purification Kit	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

<b>Specific treatments</b>	: Lambda DNA Purification Kit	No specific treatment.
	RNase A	
	Lambda DNA Purification Kit	No specific treatment.
	DNase I	
	Lambda DNA Purification Kit	No specific treatment.
	Pronase	
	Lambda DNA Purification Kit	No specific treatment.
	80% DEAE - Cellulose	
	Lambda DNA Purification Kit	No specific treatment.
	CTAB 5%	
	Lambda DNA Purification Kit	No specific treatment.
	0.5 M EDTA pH=8.0	
	Lambda DNA Purification Kit	No specific treatment.

## Section 4. First aid measures

	NaCl 1.2 M	
	Lambda DNA Purification Kit	No specific treatment.
<b>Protection of first-aiders</b>	: Lambda DNA Purification Kit	No action shall be taken involving any personal risk or without suitable training.
	RNase A	
	Lambda DNA Purification Kit	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
	DNase I	
	Lambda DNA Purification Kit	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
	Pronase	
	Lambda DNA Purification Kit	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
	80% DEAE - Cellulose	
	Lambda DNA Purification Kit	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
	CTAB 5%	
	Lambda DNA Purification Kit	No action shall be taken involving any personal risk or without suitable training.
	0.5 M EDTA pH=8.0	
	Lambda DNA Purification Kit	No action shall be taken involving any personal risk or without suitable training.
	NaCl 1.2 M	
	Lambda DNA Purification Kit	No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

## Section 5. Firefighting measures

### Extinguishing media

<b>Suitable extinguishing media</b>	: Lambda DNA Purification Kit	Use an extinguishing agent suitable for the surrounding fire.
	RNase A	
	Lambda DNA Purification Kit	Use an extinguishing agent suitable for the surrounding fire.
	DNase I	
	Lambda DNA Purification Kit	Use an extinguishing agent suitable for the surrounding fire.
	Pronase	
	Lambda DNA Purification Kit	Use an extinguishing agent suitable for the surrounding fire.
	80% DEAE - Cellulose	
	Lambda DNA Purification Kit	Use an extinguishing agent suitable for the surrounding fire.
	CTAB 5%	
	Lambda DNA Purification Kit	Use an extinguishing agent suitable for the surrounding fire.
	0.5 M EDTA pH=8.0	
	Lambda DNA Purification Kit	Use an extinguishing agent suitable for the surrounding fire.
	NaCl 1.2 M	
	Lambda DNA Purification Kit	Use an extinguishing agent suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	: Lambda DNA Purification Kit	None known.
	RNase A	
	Lambda DNA Purification Kit	None known.
	DNase I	
	Lambda DNA Purification Kit	None known.
	Pronase	
	Lambda DNA Purification Kit	None known.
	80% DEAE - Cellulose	

## Section 5. Firefighting measures

Lambda DNA Purification Kit None known.  
 CTAB 5%  
 Lambda DNA Purification Kit None known.  
 0.5 M EDTA pH=8.0  
 Lambda DNA Purification Kit None known.  
 NaCl 1.2 M  
 Lambda DNA Purification Kit None known.



**Specific hazards arising from the chemical**

: **☒** Lambda DNA Purification Kit RNase A In a fire or if heated, a pressure increase will occur and the container may burst.  
 Lambda DNA Purification Kit DNase I In a fire or if heated, a pressure increase will occur and the container may burst.  
 Lambda DNA Purification Kit Pronase In a fire or if heated, a pressure increase will occur and the container may burst.  
 Lambda DNA Purification Kit 80% DEAE - Cellulose In a fire or if heated, a pressure increase will occur and the container may burst.  
 Lambda DNA Purification Kit CTAB 5% In a fire or if heated, a pressure increase will occur and the container may burst. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.  
 Lambda DNA Purification Kit 0.5 M EDTA pH=8.0 In a fire or if heated, a pressure increase will occur and the container may burst.  
 Lambda DNA Purification Kit NaCl 1.2 M In a fire or if heated, a pressure increase will occur and the container may burst.  
 Lambda DNA Purification Kit In a fire or if heated, a pressure increase will occur and the container may burst.

**Hazardous thermal decomposition products**

: **☒** Lambda DNA Purification Kit RNase A Decomposition products may include the following materials:  
 carbon dioxide  
 carbon monoxide  
 nitrogen oxides  
 halogenated compounds  
 Lambda DNA Purification Kit DNase I Decomposition products may include the following materials:  
 carbon dioxide  
 carbon monoxide  
 phosphorus oxides  
 Lambda DNA Purification Kit Pronase Decomposition products may include the following materials:  
 carbon dioxide  
 carbon monoxide  
 nitrogen oxides  
 halogenated compounds  
 Lambda DNA Purification Kit 80% DEAE - Cellulose Decomposition products may include the following materials:  
 carbon dioxide  
 carbon monoxide  
 phosphorus oxides  
 Lambda DNA Purification Kit CTAB 5% Decomposition products may include the following materials:  
 carbon dioxide  
 carbon monoxide  
 nitrogen oxides  
 halogenated compounds  
 metal oxide/oxides  
 Lambda DNA Purification Kit 0.5 M EDTA pH=8.0 No specific data.  
 Lambda DNA Purification Kit NaCl 1.2 M Decomposition products may include the following materials:  
 halogenated compounds

## Section 5. Firefighting measures

		metal oxide/oxides Decomposition products may include the following materials: carbon dioxide carbon monoxide
<b>Special protective actions for fire-fighters</b>	:  Lambda DNA Purification Kit RNase A	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.
	Lambda DNA Purification Kit DNase I	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.
	Lambda DNA Purification Kit Pronase	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.
	Lambda DNA Purification Kit 80% DEAE - Cellulose	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.
	Lambda DNA Purification Kit CTAB 5%	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.
	Lambda DNA Purification Kit 0.5 M EDTA pH=8.0	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.
	Lambda DNA Purification Kit NaCl 1.2 M	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.
	Lambda DNA Purification Kit	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.
<b>Special protective equipment for fire-fighters</b>	:  Lambda DNA Purification Kit RNase A	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Lambda DNA Purification Kit DNase I	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Lambda DNA Purification Kit Pronase	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Lambda DNA Purification Kit 80% DEAE - Cellulose	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Lambda DNA Purification Kit CTAB 5%	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Lambda DNA Purification Kit 0.5 M EDTA pH=8.0	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Lambda DNA Purification Kit	Fire-fighters should wear appropriate protective

## Section 5. Firefighting measures

	NaCl 1.2 M	equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Lambda DNA Purification Kit	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
<b>Hazchem code</b>	: <input checked="" type="checkbox"/> Lambda DNA Purification Kit	Not available.
	RNase A	
	Lambda DNA Purification Kit	Not available.
	DNase I	
	Lambda DNA Purification Kit	Not available.
	Pronase	
	Lambda DNA Purification Kit	Not available.
	80% DEAE - Cellulose	
	Lambda DNA Purification Kit	•3Z
	CTAB 5%	
	Lambda DNA Purification Kit	Not available.
	0.5 M EDTA pH=8.0	
	Lambda DNA Purification Kit	Not available.
	NaCl 1.2 M	
	Lambda DNA Purification Kit	Not available.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

#### **For non-emergency personnel**

: <input checked="" type="checkbox"/> Lambda DNA Purification Kit	RNase A	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.
Lambda DNA Purification Kit	DNase I	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. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
Lambda DNA Purification Kit	Pronase	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. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
Lambda DNA Purification Kit	80% DEAE - Cellulose	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. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
Lambda DNA Purification Kit	CTAB 5%	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. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on



## Section 6. Accidental release measures

	Lambda DNA Purification Kit 0.5 M EDTA pH=8.0	appropriate personal protective equipment. 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.
	Lambda DNA Purification Kit NaCl 1.2 M	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.
	Lambda DNA Purification Kit	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.
<b>For emergency responders :</b>	☒ Lambda DNA Purification Kit RNase A	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".
	Lambda DNA Purification Kit DNase I	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".
	Lambda DNA Purification Kit Pronase	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".
	Lambda DNA Purification Kit 80% DEAE - Cellulose	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".
	Lambda DNA Purification Kit CTAB 5%	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".
	Lambda DNA Purification Kit 0.5 M EDTA pH=8.0	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".
	Lambda DNA Purification Kit NaCl 1.2 M	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".
	Lambda DNA Purification Kit	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".
<b>Environmental precautions :</b>	☒ Lambda DNA Purification Kit RNase A	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).
	Lambda DNA Purification Kit DNase I	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).
	Lambda DNA Purification Kit	Avoid dispersal of spilt material and runoff and

## Section 6. Accidental release measures

Pronase	contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Lambda DNA Purification Kit 80% DEAE - Cellulose	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).
Lambda DNA Purification Kit CTAB 5%	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). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.
Lambda DNA Purification Kit 0.5 M EDTA pH=8.0	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).
Lambda DNA Purification Kit NaCl 1.2 M	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).
Lambda DNA Purification Kit	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).

### Methods and material for containment and cleaning up

<b>Methods for cleaning up</b>	:	<p>Lambda DNA Purification Kit RNase A</p> <p>Lambda DNA Purification Kit DNase I</p> <p>Lambda DNA Purification Kit Pronase</p> <p>Lambda DNA Purification Kit 80% DEAE - Cellulose</p> <p>Lambda DNA Purification Kit CTAB 5%</p>	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>
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## Section 6. Accidental release measures

Lambda DNA Purification Kit 0.5 M EDTA pH=8.0	disposal contractor. 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.
Lambda DNA Purification Kit NaCl 1.2 M	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.
Lambda DNA Purification Kit	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


### Precautions for safe handling

#### Protective measures

:  Lambda DNA Purification Kit RNase A	Put on appropriate personal protective equipment (see Section 8).
Lambda DNA Purification Kit DNase I	Put on appropriate personal protective equipment (see Section 8). Persons with a history of asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Lambda DNA Purification Kit Pronase	Put on appropriate personal protective equipment (see Section 8). Persons with a history of asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Lambda DNA Purification Kit 80% DEAE - Cellulose	Put on appropriate personal protective equipment (see Section 8). Persons with a history of asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not

## Section 7. Handling and storage

**Advice on general occupational hygiene**

<p>Lambda DNA Purification Kit CTAB 5%</p>	<p>reuse container. Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.</p>
<p>Lambda DNA Purification Kit 0.5 M EDTA pH=8.0</p>	<p>Put on appropriate personal protective equipment (see Section 8).</p>
<p>Lambda DNA Purification Kit NaCl 1.2 M</p>	<p>Put on appropriate personal protective equipment (see Section 8).</p>
<p>Lambda DNA Purification Kit</p>	<p>Put on appropriate personal protective equipment (see Section 8).</p>
<p><b>Advice on general occupational hygiene</b> :  Lambda DNA Purification Kit RNase A</p>	<p>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.</p>
<p>Lambda DNA Purification Kit DNase I</p>	<p>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.</p>
<p>Lambda DNA Purification Kit Pronase</p>	<p>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.</p>
<p>Lambda DNA Purification Kit 80% DEAE - Cellulose</p>	<p>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.</p>
<p>Lambda DNA Purification Kit CTAB 5%</p>	<p>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.</p>
<p>Lambda DNA Purification Kit 0.5 M EDTA pH=8.0</p>	<p>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.</p>
<p>Lambda DNA Purification Kit NaCl 1.2 M</p>	<p>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</p>

## Section 7. Handling and storage

	Lambda DNA Purification Kit	<p>additional information on hygiene measures. 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.</p>
<p><b>Conditions for safe storage, including any incompatibilities</b></p>	<p>: Lambda DNA Purification Kit RNase A</p>	<p>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.</p>
	Lambda DNA Purification Kit DNase I	<p>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.</p>
	Lambda DNA Purification Kit Pronase	<p>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.</p>
	Lambda DNA Purification Kit 80% DEAE - Cellulose	<p>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.</p>
	Lambda DNA Purification Kit CTAB 5%	<p>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</p>

## Section 7. Handling and storage

Lambda DNA Purification Kit 0.5 M EDTA pH=8.0	incompatible materials before handling or use. 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.
Lambda DNA Purification Kit NaCl 1.2 M	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.
Lambda DNA Purification Kit	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.

## Section 8. Exposure controls and personal protection

### Control parameters

### Occupational exposure limits

None.

### Appropriate engineering controls

: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

### 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

: 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.

## Section 8. Exposure controls and personal protection

- 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: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
- 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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- 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

### Appearance

- Physical state** :
- ☑ Lambda DNA Purification Kit RNase A Liquid.
  - Lambda DNA Purification Kit DNase I Liquid.
  - Lambda DNA Purification Kit Pronase Liquid.
  - Lambda DNA Purification Kit 80% DEAE - Cellulose Liquid.
  - Lambda DNA Purification Kit CTAB 5% Liquid.
  - Lambda DNA Purification Kit 0.5 M EDTA pH=8.0 Liquid.
  - Lambda DNA Purification Kit NaCl 1.2 M Liquid.
  - Lambda DNA Purification Kit Liquid.
- Colour** :
- ☑ Lambda DNA Purification Kit RNase A Not available.
  - Lambda DNA Purification Kit DNase I Not available.
  - Lambda DNA Purification Kit Pronase Not available.
  - Lambda DNA Purification Kit 80% DEAE - Cellulose Not available.
  - Lambda DNA Purification Kit CTAB 5% Not available.
  - Lambda DNA Purification Kit 0.5 M EDTA pH=8.0 Not available.
  - Lambda DNA Purification Kit NaCl 1.2 M Not available.
  - Lambda DNA Purification Kit Not available.

## Section 9. Physical and chemical properties

<b>Odour</b>	: <input checked="" type="checkbox"/> Lambda DNA Purification Kit Not available. RNase A Lambda DNA Purification Kit Not available. DNase I Lambda DNA Purification Kit Not available. Pronase Lambda DNA Purification Kit Not available. 80% DEAE - Cellulose Lambda DNA Purification Kit Not available. CTAB 5% Lambda DNA Purification Kit Not available. 0.5 M EDTA pH=8.0 Lambda DNA Purification Kit Not available. NaCl 1.2 M Lambda DNA Purification Kit Not available.
<b>Odour threshold</b>	: <input checked="" type="checkbox"/> Lambda DNA Purification Kit Not available. RNase A Lambda DNA Purification Kit Not available. DNase I Lambda DNA Purification Kit Not available. Pronase Lambda DNA Purification Kit Not available. 80% DEAE - Cellulose Lambda DNA Purification Kit Not available. CTAB 5% Lambda DNA Purification Kit Not available. 0.5 M EDTA pH=8.0 Lambda DNA Purification Kit Not available. NaCl 1.2 M Lambda DNA Purification Kit Not available.
<b>pH</b>	: <input checked="" type="checkbox"/> Lambda DNA Purification Kit 7.5 RNase A Lambda DNA Purification Kit Not available. DNase I Lambda DNA Purification Kit 7.5 Pronase Lambda DNA Purification Kit 7.5 80% DEAE - Cellulose Lambda DNA Purification Kit Not available. CTAB 5% Lambda DNA Purification Kit 8 0.5 M EDTA pH=8.0 Lambda DNA Purification Kit Not available. NaCl 1.2 M Lambda DNA Purification Kit Not available.
<b>Melting point</b>	: <input checked="" type="checkbox"/> Lambda DNA Purification Kit 0°C (32°F) RNase A Lambda DNA Purification Kit 0°C (32°F) DNase I Lambda DNA Purification Kit Not available. Pronase Lambda DNA Purification Kit Not available. 80% DEAE - Cellulose Lambda DNA Purification Kit Not available. CTAB 5% Lambda DNA Purification Kit 0°C (32°F) 0.5 M EDTA pH=8.0 Lambda DNA Purification Kit Not available. NaCl 1.2 M Lambda DNA Purification Kit 0°C (32°F)



## Section 9. Physical and chemical properties

<b>Boiling point</b>	:	Lambda DNA Purification Kit	100°C (212°F)
		RNase A	
		Lambda DNA Purification Kit	100°C (212°F)
		DNase I	
		Lambda DNA Purification Kit	Not available.
		Pronase	
		Lambda DNA Purification Kit	Not available.
		80% DEAE - Cellulose	
		Lambda DNA Purification Kit	Not available.
		CTAB 5%	
<b>Flash point</b>	:	Lambda DNA Purification Kit	100°C (212°F)
		0.5 M EDTA pH=8.0	
		Lambda DNA Purification Kit	Not available.
		NaCl 1.2 M	
		Lambda DNA Purification Kit	100°C (212°F)
		RNase A	Not available.
		Lambda DNA Purification Kit	Not available.
		DNase I	
		Lambda DNA Purification Kit	Not available.
		Pronase	
<b>Evaporation rate</b>	:	Lambda DNA Purification Kit	Not available.
		RNase A	
		Lambda DNA Purification Kit	Not available.
		DNase I	
		Lambda DNA Purification Kit	Not available.
		Pronase	
		Lambda DNA Purification Kit	Not available.
		80% DEAE - Cellulose	
		Lambda DNA Purification Kit	Not available.
		CTAB 5%	
<b>Flammability (solid, gas)</b>	:	Lambda DNA Purification Kit	Not applicable.
		RNase A	
		Lambda DNA Purification Kit	Not applicable.
		DNase I	
		Lambda DNA Purification Kit	Not applicable.
		Pronase	
		Lambda DNA Purification Kit	Not applicable.
		80% DEAE - Cellulose	
		Lambda DNA Purification Kit	Not applicable.
		CTAB 5%	
	Lambda DNA Purification Kit	Not applicable.	
	0.5 M EDTA pH=8.0		
	Lambda DNA Purification Kit	Not applicable.	
	NaCl 1.2 M		
	Lambda DNA Purification Kit	Not applicable.	

## Section 9. Physical and chemical properties

<b>Lower and upper explosive (flammable) limits</b>	: <input checked="" type="checkbox"/> Lambda DNA Purification Kit Not available. RNase A Lambda DNA Purification Kit Not available. DNase I Lambda DNA Purification Kit Not available. Pronase Lambda DNA Purification Kit Not available. 80% DEAE - Cellulose Lambda DNA Purification Kit Not available. CTAB 5% Lambda DNA Purification Kit Not available. 0.5 M EDTA pH=8.0 Lambda DNA Purification Kit Not available. NaCl 1.2 M Lambda DNA Purification Kit Not available.
<b>Vapour pressure</b>	: <input checked="" type="checkbox"/> Lambda DNA Purification Kit Not available. RNase A Lambda DNA Purification Kit Not available. DNase I Lambda DNA Purification Kit Not available. Pronase Lambda DNA Purification Kit Not available. 80% DEAE - Cellulose Lambda DNA Purification Kit Not available. CTAB 5% Lambda DNA Purification Kit Not available. 0.5 M EDTA pH=8.0 Lambda DNA Purification Kit Not available. NaCl 1.2 M Lambda DNA Purification Kit Not available.
<b>Vapour density</b>	: <input checked="" type="checkbox"/> Lambda DNA Purification Kit Not available. RNase A Lambda DNA Purification Kit Not available. DNase I Lambda DNA Purification Kit Not available. Pronase Lambda DNA Purification Kit Not available. 80% DEAE - Cellulose Lambda DNA Purification Kit Not available. CTAB 5% Lambda DNA Purification Kit Not available. 0.5 M EDTA pH=8.0 Lambda DNA Purification Kit Not available. NaCl 1.2 M Lambda DNA Purification Kit Not available.
<b>Relative density</b>	: <input checked="" type="checkbox"/> Lambda DNA Purification Kit Not available. RNase A Lambda DNA Purification Kit Not available. DNase I Lambda DNA Purification Kit Not available. Pronase Lambda DNA Purification Kit Not available. 80% DEAE - Cellulose Lambda DNA Purification Kit Not available. CTAB 5% Lambda DNA Purification Kit Not available. 0.5 M EDTA pH=8.0 Lambda DNA Purification Kit Not available. NaCl 1.2 M Lambda DNA Purification Kit Not available.

## Section 9. Physical and chemical properties

<b>Solubility</b>	:	Lambda DNA Purification Kit RNase A	Easily soluble in the following materials: cold water and hot water.
		Lambda DNA Purification Kit DNase I	Easily soluble in the following materials: cold water and hot water.
		Lambda DNA Purification Kit Pronase	Easily soluble in the following materials: cold water and hot water.
		Lambda DNA Purification Kit 80% DEAE - Cellulose	Soluble in the following materials: cold water and hot water.
		Lambda DNA Purification Kit CTAB 5%	Easily soluble in the following materials: cold water and hot water.
		Lambda DNA Purification Kit 0.5 M EDTA pH=8.0	Easily soluble in the following materials: cold water and hot water.
		Lambda DNA Purification Kit NaCl 1.2 M	Easily soluble in the following materials: cold water and hot water.
		Lambda DNA Purification Kit	Easily soluble in the following materials: cold water and hot water.
	<b>Partition coefficient: n-octanol/water</b>	:	Lambda DNA Purification Kit RNase A
		Lambda DNA Purification Kit DNase I	Not available.
		Lambda DNA Purification Kit Pronase	Not available.
		Lambda DNA Purification Kit 80% DEAE - Cellulose	Not available.
		Lambda DNA Purification Kit CTAB 5%	Not available.
		Lambda DNA Purification Kit 0.5 M EDTA pH=8.0	Not available.
		Lambda DNA Purification Kit NaCl 1.2 M	Not available.
		Lambda DNA Purification Kit	Not available.
<b>Auto-ignition temperature</b>		:	Lambda DNA Purification Kit RNase A
		Lambda DNA Purification Kit DNase I	Not available.
		Lambda DNA Purification Kit Pronase	Not available.
		Lambda DNA Purification Kit 80% DEAE - Cellulose	Not available.
		Lambda DNA Purification Kit CTAB 5%	Not available.
		Lambda DNA Purification Kit 0.5 M EDTA pH=8.0	Not available.
		Lambda DNA Purification Kit NaCl 1.2 M	Not available.
		Lambda DNA Purification Kit	Not available.
	<b>Decomposition temperature</b>	:	Lambda DNA Purification Kit RNase A
		Lambda DNA Purification Kit DNase I	Not available.
		Lambda DNA Purification Kit Pronase	Not available.
		Lambda DNA Purification Kit 80% DEAE - Cellulose	Not available.
		Lambda DNA Purification Kit CTAB 5%	Not available.
		Lambda DNA Purification Kit 0.5 M EDTA pH=8.0	Not available.
		Lambda DNA Purification Kit NaCl 1.2 M	Not available.
		Lambda DNA Purification Kit	Not available.

## Section 9. Physical and chemical properties

<b>Viscosity</b>	: Lambda DNA Purification Kit	Not available.
	RNase A	
	Lambda DNA Purification Kit	Not available.
	DNase I	
	Lambda DNA Purification Kit	Not available.
	Pronase	
	Lambda DNA Purification Kit	Not available.
	80% DEAE - Cellulose	
	Lambda DNA Purification Kit	Not available.
	CTAB 5%	
Lambda DNA Purification Kit	Not available.	
0.5 M EDTA pH=8.0		
Lambda DNA Purification Kit	Not available.	
NaCl 1.2 M		
Lambda DNA Purification Kit	Not available.	

## Section 10. Stability and reactivity

<b>Reactivity</b>	: Lambda DNA Purification Kit	No specific test data related to reactivity available for this product or its ingredients.
	RNase A	
	Lambda DNA Purification Kit	No specific test data related to reactivity available for this product or its ingredients.
	DNase I	
	Lambda DNA Purification Kit	No specific test data related to reactivity available for this product or its ingredients.
	Pronase	
	Lambda DNA Purification Kit	No specific test data related to reactivity available for this product or its ingredients.
	80% DEAE - Cellulose	
	Lambda DNA Purification Kit	No specific test data related to reactivity available for this product or its ingredients.
	CTAB 5%	
Lambda DNA Purification Kit	No specific test data related to reactivity available for this product or its ingredients.	
0.5 M EDTA pH=8.0		
Lambda DNA Purification Kit	No specific test data related to reactivity available for this product or its ingredients.	
NaCl 1.2 M		
Lambda DNA Purification Kit	No specific test data related to reactivity available for this product or its ingredients.	


<b>Chemical stability</b>	: Lambda DNA Purification Kit	The product is stable.
	RNase A	
	Lambda DNA Purification Kit	The product is stable.
	DNase I	
	Lambda DNA Purification Kit	The product is stable.
	Pronase	
	Lambda DNA Purification Kit	The product is stable.
	80% DEAE - Cellulose	
	Lambda DNA Purification Kit	The product is stable.
	CTAB 5%	
Lambda DNA Purification Kit	The product is stable.	
0.5 M EDTA pH=8.0		
Lambda DNA Purification Kit	The product is stable.	
NaCl 1.2 M		
Lambda DNA Purification Kit	The product is stable.	

<b>Possibility of hazardous reactions</b>	: Lambda DNA Purification Kit	Under normal conditions of storage and use, hazardous reactions will not occur.
	RNase A	
	Lambda DNA Purification Kit	Under normal conditions of storage and use, hazardous reactions will not occur.
	DNase I	
	Lambda DNA Purification Kit	Under normal conditions of storage and use, hazardous reactions will not occur.
	Pronase	
	Lambda DNA Purification Kit	Under normal conditions of storage and use, hazardous reactions will not occur.
	80% DEAE - Cellulose	
	Lambda DNA Purification Kit	Under normal conditions of storage and use, hazardous reactions will not occur.
	CTAB 5%	
Lambda DNA Purification Kit	Under normal conditions of storage and use, hazardous reactions will not occur.	
0.5 M EDTA pH=8.0		


## Section 10. Stability and reactivity

Lambda DNA Purification Kit NaCl 1.2 M	Under normal conditions of storage and use, hazardous reactions will not occur.
Lambda DNA Purification Kit	Under normal conditions of storage and use, hazardous reactions will not occur.


### Conditions to avoid

:  Lambda DNA Purification Kit RNase A	No specific data.
Lambda DNA Purification Kit DNase I	No specific data.
Lambda DNA Purification Kit Pronase	No specific data.
Lambda DNA Purification Kit 80% DEAE - Cellulose	No specific data.
Lambda DNA Purification Kit CTAB 5%	No specific data.
Lambda DNA Purification Kit 0.5 M EDTA pH=8.0	No specific data.
Lambda DNA Purification Kit NaCl 1.2 M	No specific data.
Lambda DNA Purification Kit	No specific data.

### Incompatible materials

:  Lambda DNA Purification Kit RNase A	May react or be incompatible with oxidising materials.
Lambda DNA Purification Kit DNase I	May react or be incompatible with oxidising materials.
Lambda DNA Purification Kit Pronase	May react or be incompatible with oxidising materials.
Lambda DNA Purification Kit 80% DEAE - Cellulose	May react or be incompatible with oxidising materials.
Lambda DNA Purification Kit CTAB 5%	May react or be incompatible with oxidising materials.
Lambda DNA Purification Kit 0.5 M EDTA pH=8.0	May react or be incompatible with oxidising materials.
Lambda DNA Purification Kit NaCl 1.2 M	May react or be incompatible with oxidising materials.
Lambda DNA Purification Kit	May react or be incompatible with oxidising materials.

### Hazardous decomposition products

:  Lambda DNA Purification Kit RNase A	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Lambda DNA Purification Kit DNase I	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Lambda DNA Purification Kit Pronase	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Lambda DNA Purification Kit 80% DEAE - Cellulose	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Lambda DNA Purification Kit CTAB 5%	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Lambda DNA Purification Kit 0.5 M EDTA pH=8.0	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Lambda DNA Purification Kit NaCl 1.2 M	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Lambda DNA Purification Kit	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
<b>Lambda DNA Purification Kit Pronase</b> Proteinase, Streptomyces griseus	LD50 Oral	Rat	3290 mg/kg	-
<b>Lambda DNA Purification Kit CTAB 5%</b> Cetrimonium bromide	LD50 Oral	Rat	410 mg/kg	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
<b>Lambda DNA Purification Kit CTAB 5%</b> Cetrimonium bromide	Eyes - Severe irritant	Rabbit	-	450 milligrams	-

#### Sensitisation

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)

Name	Category	Route of exposure	Target organs
<b>Lambda DNA Purification Kit Pronase</b> Proteinase, Streptomyces griseus	Category 3	Not applicable.	Respiratory tract irritation

#### Specific target organ toxicity (repeated exposure)

Not available.

#### Aspiration hazard

Not available.

**Information on likely routes of exposure** :

- ▶ Lambda DNA Purification Kit RNase A Routes of entry anticipated: Oral, Dermal, Inhalation.
- ▶ Lambda DNA Purification Kit DNase I Not available.
- ▶ Lambda DNA Purification Kit Pronase Routes of entry anticipated: Oral, Dermal, Inhalation.
- ▶ Lambda DNA Purification Kit 80% DEAE - Cellulose Not available.
- ▶ Lambda DNA Purification Kit CTAB 5% Routes of entry anticipated: Oral, Dermal, Inhalation.
- ▶ Lambda DNA Purification Kit 0.5 M EDTA pH=8.0 Not available.
- ▶ Lambda DNA Purification Kit NaCl 1.2 M Not available.

## Section 11. Toxicological information

Lambda DNA Purification Kit Not available.

### Potential acute health effects

#### Eye contact

- : Lambda DNA Purification Kit RNase A No known significant effects or critical hazards.
- Lambda DNA Purification Kit DNase I No known significant effects or critical hazards.
- Lambda DNA Purification Kit Pronase No known significant effects or critical hazards.
- Lambda DNA Purification Kit 80% DEAE - Cellulose No known significant effects or critical hazards.
- Lambda DNA Purification Kit CTAB 5% No known significant effects or critical hazards.
- Lambda DNA Purification Kit 0.5 M EDTA pH=8.0 No known significant effects or critical hazards.
- Lambda DNA Purification Kit NaCl 1.2 M No known significant effects or critical hazards.

#### Inhalation

- : Lambda DNA Purification Kit RNase A No known significant effects or critical hazards.
- Lambda DNA Purification Kit DNase I May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- Lambda DNA Purification Kit Pronase May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- Lambda DNA Purification Kit 80% DEAE - Cellulose May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- Lambda DNA Purification Kit CTAB 5% No known significant effects or critical hazards.
- Lambda DNA Purification Kit 0.5 M EDTA pH=8.0 No known significant effects or critical hazards.
- Lambda DNA Purification Kit NaCl 1.2 M No known significant effects or critical hazards.

#### Skin contact

- : Lambda DNA Purification Kit RNase A No known significant effects or critical hazards.
- Lambda DNA Purification Kit DNase I No known significant effects or critical hazards.
- Lambda DNA Purification Kit Pronase No known significant effects or critical hazards.
- Lambda DNA Purification Kit 80% DEAE - Cellulose No known significant effects or critical hazards.
- Lambda DNA Purification Kit CTAB 5% No known significant effects or critical hazards.
- Lambda DNA Purification Kit 0.5 M EDTA pH=8.0 No known significant effects or critical hazards.
- Lambda DNA Purification Kit NaCl 1.2 M No known significant effects or critical hazards.

#### Ingestion

- : Lambda DNA Purification Kit RNase A No known significant effects or critical hazards.
- Lambda DNA Purification Kit DNase I No known significant effects or critical hazards.
- Lambda DNA Purification Kit Pronase No known significant effects or critical hazards.
- Lambda DNA Purification Kit 80% DEAE - Cellulose No known significant effects or critical hazards.
- Lambda DNA Purification Kit CTAB 5% No known significant effects or critical hazards.
- Lambda DNA Purification Kit 0.5 M EDTA pH=8.0 No known significant effects or critical hazards.
- Lambda DNA Purification Kit NaCl 1.2 M No known significant effects or critical hazards.

## Section 11. Toxicological information

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Eye contact</b>	: <input checked="" type="checkbox"/> Lambda DNA Purification Kit No specific data. RNase A Lambda DNA Purification Kit No specific data. DNase I Lambda DNA Purification Kit No specific data. Pronase Lambda DNA Purification Kit No specific data. 80% DEAE - Cellulose Lambda DNA Purification Kit No specific data. CTAB 5% Lambda DNA Purification Kit No specific data. 0.5 M EDTA pH=8.0 Lambda DNA Purification Kit No specific data. NaCl 1.2 M Lambda DNA Purification Kit No specific data.
<b>Inhalation</b>	: <input checked="" type="checkbox"/> Lambda DNA Purification Kit No specific data. RNase A Lambda DNA Purification Kit Adverse symptoms may include the following: DNase I  wheezing and breathing difficulties asthma  Lambda DNA Purification Kit Adverse symptoms may include the following: Pronase  wheezing and breathing difficulties asthma  Lambda DNA Purification Kit Adverse symptoms may include the following: 80% DEAE - Cellulose  wheezing and breathing difficulties asthma  Lambda DNA Purification Kit No specific data. CTAB 5% Lambda DNA Purification Kit No specific data. 0.5 M EDTA pH=8.0 Lambda DNA Purification Kit No specific data. NaCl 1.2 M Lambda DNA Purification Kit No specific data.
<b>Skin contact</b>	: <input checked="" type="checkbox"/> Lambda DNA Purification Kit No specific data. RNase A Lambda DNA Purification Kit No specific data. DNase I Lambda DNA Purification Kit No specific data. Pronase Lambda DNA Purification Kit No specific data. 80% DEAE - Cellulose Lambda DNA Purification Kit No specific data. CTAB 5% Lambda DNA Purification Kit No specific data. 0.5 M EDTA pH=8.0 Lambda DNA Purification Kit No specific data. NaCl 1.2 M Lambda DNA Purification Kit No specific data.
<b>Ingestion</b>	: <input checked="" type="checkbox"/> Lambda DNA Purification Kit No specific data. RNase A Lambda DNA Purification Kit No specific data. DNase I Lambda DNA Purification Kit No specific data. Pronase Lambda DNA Purification Kit No specific data. 80% DEAE - Cellulose Lambda DNA Purification Kit No specific data.



## Section 11. Toxicological information

CTAB 5%	
Lambda DNA Purification Kit	No specific data.
0.5 M EDTA pH=8.0	
Lambda DNA Purification Kit	No specific data.
NaCl 1.2 M	
Lambda DNA Purification Kit	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

<b>General</b>	:	<ul style="list-style-type: none"> <li>☒ Lambda DNA Purification Kit No known significant effects or critical hazards.</li> <li>RNase A</li> <li>Lambda DNA Purification Kit Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.</li> <li>DNase I</li> <li>Lambda DNA Purification Kit Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.</li> <li>Pronase</li> <li>Lambda DNA Purification Kit Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.</li> <li>80% DEAE - Cellulose</li> <li>Lambda DNA Purification Kit No known significant effects or critical hazards.</li> <li>CTAB 5%</li> <li>Lambda DNA Purification Kit No known significant effects or critical hazards.</li> <li>0.5 M EDTA pH=8.0</li> <li>Lambda DNA Purification Kit No known significant effects or critical hazards.</li> <li>NaCl 1.2 M</li> <li>Lambda DNA Purification Kit No known significant effects or critical hazards.</li> </ul>
<b>Carcinogenicity</b>	:	<ul style="list-style-type: none"> <li>☒ Lambda DNA Purification Kit No known significant effects or critical hazards.</li> <li>RNase A</li> <li>Lambda DNA Purification Kit No known significant effects or critical hazards.</li> <li>DNase I</li> <li>Lambda DNA Purification Kit No known significant effects or critical hazards.</li> <li>Pronase</li> <li>Lambda DNA Purification Kit No known significant effects or critical hazards.</li> <li>80% DEAE - Cellulose</li> <li>Lambda DNA Purification Kit No known significant effects or critical hazards.</li> <li>CTAB 5%</li> <li>Lambda DNA Purification Kit No known significant effects or critical hazards.</li> <li>0.5 M EDTA pH=8.0</li> <li>Lambda DNA Purification Kit No known significant effects or critical hazards.</li> <li>NaCl 1.2 M</li> <li>Lambda DNA Purification Kit No known significant effects or critical hazards.</li> </ul>
<b>Mutagenicity</b>	:	<ul style="list-style-type: none"> <li>☒ Lambda DNA Purification Kit No known significant effects or critical hazards.</li> <li>RNase A</li> <li>Lambda DNA Purification Kit No known significant effects or critical hazards.</li> <li>DNase I</li> <li>Lambda DNA Purification Kit No known significant effects or critical hazards.</li> <li>Pronase</li> <li>Lambda DNA Purification Kit No known significant effects or critical hazards.</li> <li>80% DEAE - Cellulose</li> <li>Lambda DNA Purification Kit No known significant effects or critical hazards.</li> <li>CTAB 5%</li> <li>Lambda DNA Purification Kit No known significant effects or critical hazards.</li> <li>0.5 M EDTA pH=8.0</li> </ul>

## Section 11. Toxicological information

	Lambda DNA Purification Kit	No known significant effects or critical hazards.
	NaCl 1.2 M	
<b>Teratogenicity</b>	: Lambda DNA Purification Kit	No known significant effects or critical hazards.
	RNase A	
	Lambda DNA Purification Kit	No known significant effects or critical hazards.
	DNase I	
	Lambda DNA Purification Kit	No known significant effects or critical hazards.
	Pronase	
	Lambda DNA Purification Kit	No known significant effects or critical hazards.
	80% DEAE - Cellulose	
	Lambda DNA Purification Kit	No known significant effects or critical hazards.
	CTAB 5%	
	Lambda DNA Purification Kit	No known significant effects or critical hazards.
	0.5 M EDTA pH=8.0	
	Lambda DNA Purification Kit	No known significant effects or critical hazards.
	NaCl 1.2 M	
	Lambda DNA Purification Kit	No known significant effects or critical hazards.
<b>Developmental effects</b>	: Lambda DNA Purification Kit	No known significant effects or critical hazards.
	RNase A	
	Lambda DNA Purification Kit	No known significant effects or critical hazards.
	DNase I	
	Lambda DNA Purification Kit	No known significant effects or critical hazards.
	Pronase	
	Lambda DNA Purification Kit	No known significant effects or critical hazards.
	80% DEAE - Cellulose	
	Lambda DNA Purification Kit	No known significant effects or critical hazards.
	CTAB 5%	
	Lambda DNA Purification Kit	No known significant effects or critical hazards.
	0.5 M EDTA pH=8.0	
	Lambda DNA Purification Kit	No known significant effects or critical hazards.
	NaCl 1.2 M	
	Lambda DNA Purification Kit	No known significant effects or critical hazards.
<b>Fertility effects</b>	: Lambda DNA Purification Kit	No known significant effects or critical hazards.
	RNase A	
	Lambda DNA Purification Kit	No known significant effects or critical hazards.
	DNase I	
	Lambda DNA Purification Kit	No known significant effects or critical hazards.
	Pronase	
	Lambda DNA Purification Kit	No known significant effects or critical hazards.
	80% DEAE - Cellulose	
	Lambda DNA Purification Kit	No known significant effects or critical hazards.
	CTAB 5%	
	Lambda DNA Purification Kit	No known significant effects or critical hazards.
	0.5 M EDTA pH=8.0	
	Lambda DNA Purification Kit	No known significant effects or critical hazards.
	NaCl 1.2 M	
	Lambda DNA Purification Kit	No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Route	ATE value
Lambda DNA Purification Kit CTAB 5% Oral	8200 mg/kg

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
<b>Lambda DNA Purification Kit CTAB 5%</b> Cetrimonium bromide	Acute EC50 90 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours

### Persistence and degradability

Not available.

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<b>Lambda DNA Purification Kit CTAB 5%</b> Cetrimonium bromide	-	444 to 677	high

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

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

## Section 13. Disposal considerations

**Disposal methods** : 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. 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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. 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

**ADG / IMDG / IATA** : Not regulated as Dangerous Goods according to the ADG Code .

**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 Annex II of Marpol and the IBC Code** : Not available.

## Section 15. Regulatory information

### Standard Uniform Schedule of Medicine and Poisons

Not regulated.

### Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

### 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

<b>Australia</b>	: Not determined.
<b>Canada</b>	: Not determined.
<b>China</b>	: Not determined.
<b>Europe</b>	: All components are listed or exempted.
<b>Japan</b>	: <b>Japan inventory (ENCS)</b> : Not determined. <b>Japan inventory (ISHL)</b> : Not determined.
<b>Malaysia</b>	: Not determined.
<b>New Zealand</b>	: Not determined.
<b>Philippines</b>	: Not determined.
<b>Republic of Korea</b>	: Not determined.
<b>Taiwan</b>	: Not determined.
<b>Thailand</b>	: <input checked="" type="checkbox"/> Not determined.
<b>Turkey</b>	: Not determined.
<b>United States</b>	: Not determined.
<b>Viet Nam</b>	: <input checked="" type="checkbox"/> Not determined.

## Section 16. Any other relevant information

### History

**Date of issue/Date of revision** : 19/02/2018

**Date of previous issue** : 02/08/2016

**Version** : 5

### Key to abbreviations

ADG = Australian Dangerous Goods  
 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)  
 NOHSC = National Occupational Health and Safety Commission

## Section 16. Any other relevant information

SUSMP = Standard Uniform Schedule of Medicine and Poisons  
 UN = United Nations

### Procedure used to derive the classification

Classification	Justification
<b>✓</b> Lambda DNA Purification Kit DNase I Resp. Sens. 1, H334	Calculation method
Lambda DNA Purification Kit Pronase Resp. Sens. 1, H334	Calculation method
Lambda DNA Purification Kit 80% DEAE - Cellulose Resp. Sens. 1, H334	Calculation method
Lambda DNA Purification Kit CTAB 5% Aquatic Acute 1, H400 Aquatic Chronic 1, H410	Calculation method Calculation method

**References** : Not available.

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

### Notice to reader

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