

# SAFETY DATA SHEET



Lambda FIX II Xho I Partial Fill-In - Gigapack III XL Cloning Kit, Part Number 248712

## Section 1. Identification

<b>Product identifier</b>	: Lambda FIX II Xho I Partial Fill-In - Gigapack III XL Cloning Kit, Part Number 248712		
<b>Part No. (Chemical Kit)</b>	: 248712		
<b>Part No.</b>	: Gigapack III XL - 11 packaging extract	200207-41	
	Wild-Type Lambda DNA c1857ind 1 Sam7	246203-51	
	VCS257 E. coli Strain	200256-51	
	Lambda FixII Vector Predigested With Xho I	248211-51	
	XL1-Blue MRA E.coli Strain	200302-81	
	XL1-Blue MRA (p2) E.coli Strain	200303-81	
	pMF/BamH I Test Insert	210200-55	

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

Analytical reagent.

Gigapack III XL - 11 packaging extract	0.275 ml (11 x 0.025 ml)
Wild-Type Lambda DNA c1857ind 1 Sam7	0.005 ml (0.21 µg/µl)
VCS257 E. coli Strain	1 ml
Lambda FixII Vector Predigested With Xho I	0.01 ml
XL1-Blue MRA E.coli Strain	0.5 ml
XL1-Blue MRA (p2) E.coli Strain	0.5 ml
pMF/BamH I Test Insert	0.01 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

Not classified.

### GHS label elements

<b>Signal word</b>	: Gigapack III XL - 11 packaging extract	No signal word.
	Wild-Type Lambda DNA c1857ind 1 Sam7	No signal word.
	VCS257 E. coli Strain	No signal word.
	Lambda FixII Vector Predigested With Xho I	No signal word.
	XL1-Blue MRA E.coli Strain	No signal word.
	XL1-Blue MRA (p2) E.coli Strain	No signal word.
	pMF/BamH I Test Insert	No signal word.

## Section 2. Hazard(s) identification

<b>Hazard statements</b>	: Gigapack III XL - 11 packaging extract	No known significant effects or critical hazards.
	Wild-Type Lambda DNA c1857ind 1 Sam7	No known significant effects or critical hazards.
	VCS257 E. coli Strain	No known significant effects or critical hazards.
	Lambda FixII Vector	No known significant effects or critical hazards.
	Predigested With Xho I	
	XL1-Blue MRA E.coli Strain	No known significant effects or critical hazards.
	XL1-Blue MRA (p2) E.coli Strain	No known significant effects or critical hazards.
	pMF/BamH I Test Insert	No known significant effects or critical hazards.

### Precautionary statements

<b>Prevention</b>	: Gigapack III XL - 11 packaging extract	Not applicable.
	Wild-Type Lambda DNA c1857ind 1 Sam7	Not applicable.
	VCS257 E. coli Strain	Not applicable.
	Lambda FixII Vector	Not applicable.
	Predigested With Xho I	
	XL1-Blue MRA E.coli Strain	Not applicable.
	XL1-Blue MRA (p2) E.coli Strain	Not applicable.
	pMF/BamH I Test Insert	Not applicable.

<b>Response</b>	: Gigapack III XL - 11 packaging extract	Not applicable.
	Wild-Type Lambda DNA c1857ind 1 Sam7	Not applicable.
	VCS257 E. coli Strain	Not applicable.
	Lambda FixII Vector	Not applicable.
	Predigested With Xho I	
	XL1-Blue MRA E.coli Strain	Not applicable.
	XL1-Blue MRA (p2) E.coli Strain	Not applicable.
	pMF/BamH I Test Insert	Not applicable.

<b>Storage</b>	: Gigapack III XL - 11 packaging extract	Not applicable.
	Wild-Type Lambda DNA c1857ind 1 Sam7	Not applicable.
	VCS257 E. coli Strain	Not applicable.
	Lambda FixII Vector	Not applicable.
	Predigested With Xho I	
	XL1-Blue MRA E.coli Strain	Not applicable.
	XL1-Blue MRA (p2) E.coli Strain	Not applicable.
	pMF/BamH I Test Insert	Not applicable.

<b>Disposal</b>	: Gigapack III XL - 11 packaging extract	Not applicable.
	Wild-Type Lambda DNA c1857ind 1 Sam7	Not applicable.
	VCS257 E. coli Strain	Not applicable.
	Lambda FixII Vector	Not applicable.
	Predigested With Xho I	
	XL1-Blue MRA E.coli Strain	Not applicable.
	XL1-Blue MRA (p2) E.coli Strain	Not applicable.
	pMF/BamH I Test Insert	Not applicable.

## Section 2. Hazard(s) identification

<b>Supplemental label elements</b>	: <input checked="" type="checkbox"/> Gigapack III XL - 11 packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain Lambda FixII Vector Predigested With Xho I XL1-Blue MRA E.coli Strain XL1-Blue MRA (p2) E.coli Strain pMF/BamH I Test Insert	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.
<b>Other hazards which do not result in classification</b>	: <input checked="" type="checkbox"/> Gigapack III XL - 11 packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain Lambda FixII Vector Predigested With Xho I XL1-Blue MRA E.coli Strain XL1-Blue MRA (p2) E.coli Strain pMF/BamH I Test Insert	None known. None known. None known. None known. None known. None known. None known.

## Section 3. Composition and ingredient information

<b>Substance/mixture</b>	: <input checked="" type="checkbox"/> Gigapack III XL - 11 packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain Lambda FixII Vector Predigested With Xho I XL1-Blue MRA E.coli Strain XL1-Blue MRA (p2) E.coli Strain pMF/BamH I Test Insert	Mixture Mixture Mixture Mixture Mixture Mixture Mixture
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### CAS number/other identifiers

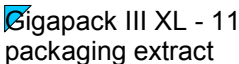
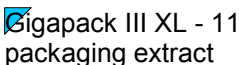
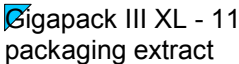
Ingredient name	% (w/w)	CAS number
<input checked="" type="checkbox"/> Gigapack III XL - 11 packaging extract Sucrose	≤10	57-50-1
<b>VCS257 E. coli Strain</b> Glycerol	≥10 - ≤30	56-81-5
<b>XL1-Blue MRA E.coli Strain</b> Glycerol	≥10 - ≤30	56-81-5
<b>XL1-Blue MRA (p2) E.coli Strain</b> Glycerol	≥10 - ≤30	56-81-5

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.

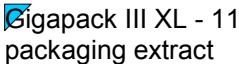
## Section 4. First aid measures

### Description of necessary first aid measures

<b>Eye contact</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.
	Wild-Type Lambda DNA c1857ind 1 Sam7	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.
	VCS257 E. coli Strain	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.
	Lambda FixII Vector Predigested With Xho I	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.
	XL1-Blue MRA E.coli Strain	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.
	XL1-Blue MRA (p2) E.coli Strain	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.
	pMF/BamH I Test Insert	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>Inhalation</b>	: 	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	Wild-Type Lambda DNA c1857ind 1 Sam7	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	VCS257 E. coli Strain	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	Lambda FixII Vector Predigested With Xho I	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	XL1-Blue MRA E.coli Strain	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	XL1-Blue MRA (p2) E.coli Strain	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	pMF/BamH I Test Insert	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
<b>Skin contact</b>	: 	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Wild-Type Lambda DNA c1857ind 1 Sam7	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	VCS257 E. coli Strain	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Lambda FixII Vector Predigested With Xho I	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

## Section 4. First aid measures

### Ingestion

XL1-Blue MRA E.coli Strain	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
XL1-Blue MRA (p2) E.coli Strain	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
pMF/BamH I Test Insert	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. 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.
Wild-Type Lambda DNA c1857ind 1 Sam7	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.
VCS257 E. coli Strain	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 FixII Vector Predigested With Xho I	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.
XL1-Blue MRA E.coli Strain	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.
XL1-Blue MRA (p2) E.coli Strain	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.
pMF/BamH I Test Insert	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

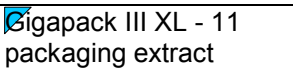
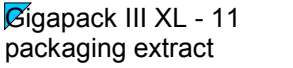
#### Potential acute health effects

## Section 4. First aid measures

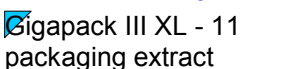
<b>Eye contact</b>	:	Gigapack III XL - 11 packaging extract	No known significant effects or critical hazards.		
		Wild-Type Lambda DNA c1857ind 1 Sam7	No known significant effects or critical hazards.		
		VCS257 E. coli Strain	No known significant effects or critical hazards.		
		Lambda FixII Vector	No known significant effects or critical hazards.		
		Predigested With Xho I			
		XL1-Blue MRA E.coli Strain	No known significant effects or critical hazards.		
		XL1-Blue MRA (p2) E.coli Strain	No known significant effects or critical hazards.		
		pMF/BamH I Test Insert	No known significant effects or critical hazards.		
		<b>Inhalation</b>	:	Gigapack III XL - 11 packaging extract	No known significant effects or critical hazards.
				Wild-Type Lambda DNA c1857ind 1 Sam7	No known significant effects or critical hazards.
VCS257 E. coli Strain	No known significant effects or critical hazards.				
Lambda FixII Vector	No known significant effects or critical hazards.				
Predigested With Xho I					
XL1-Blue MRA E.coli Strain	No known significant effects or critical hazards.				
XL1-Blue MRA (p2) E.coli Strain	No known significant effects or critical hazards.				
pMF/BamH I Test Insert	No known significant effects or critical hazards.				
<b>Skin contact</b>	:			Gigapack III XL - 11 packaging extract	No known significant effects or critical hazards.
				Wild-Type Lambda DNA c1857ind 1 Sam7	No known significant effects or critical hazards.
		VCS257 E. coli Strain	No known significant effects or critical hazards.		
		Lambda FixII Vector	No known significant effects or critical hazards.		
		Predigested With Xho I			
		XL1-Blue MRA E.coli Strain	No known significant effects or critical hazards.		
		XL1-Blue MRA (p2) E.coli Strain	No known significant effects or critical hazards.		
		pMF/BamH I Test Insert	No known significant effects or critical hazards.		
		<b>Ingestion</b>	:	Gigapack III XL - 11 packaging extract	No known significant effects or critical hazards.
				Wild-Type Lambda DNA c1857ind 1 Sam7	No known significant effects or critical hazards.
VCS257 E. coli Strain	No known significant effects or critical hazards.				
Lambda FixII Vector	No known significant effects or critical hazards.				
Predigested With Xho I					
XL1-Blue MRA E.coli Strain	No known significant effects or critical hazards.				
XL1-Blue MRA (p2) E.coli Strain	No known significant effects or critical hazards.				
pMF/BamH I Test Insert	No known significant effects or critical hazards.				
<b><u>Over-exposure signs/symptoms</u></b>					
<b>Eye contact</b>	:			Gigapack III XL - 11 packaging extract	No specific data.
		Wild-Type Lambda DNA c1857ind 1 Sam7	No specific data.		
		VCS257 E. coli Strain	No specific data.		
		Lambda FixII Vector	No specific data.		
		Predigested With Xho I			
		XL1-Blue MRA E.coli Strain	No specific data.		
		XL1-Blue MRA (p2) E.coli Strain	No specific data.		
		pMF/BamH I Test Insert	No specific data.		





## Section 4. First aid measures

<b>Inhalation</b>	:  No specific data.
	Wild-Type Lambda DNA c1857ind 1 Sam7 No specific data.
	VCS257 E. coli Strain No specific data.
	Lambda FixII Vector No specific data.
	Predigested With Xho I
	XL1-Blue MRA E.coli Strain No specific data.
	XL1-Blue MRA (p2) E.coli Strain No specific data.
<b>Skin contact</b>	:  No specific data.
	Wild-Type Lambda DNA c1857ind 1 Sam7 No specific data.
	VCS257 E. coli Strain No specific data.
	Lambda FixII Vector No specific data.
	Predigested With Xho I
	XL1-Blue MRA E.coli Strain No specific data.
	XL1-Blue MRA (p2) E.coli Strain No specific data.
<b>Ingestion</b>	:  No specific data.
	Wild-Type Lambda DNA c1857ind 1 Sam7 No specific data.
	VCS257 E. coli Strain No specific data.
	Lambda FixII Vector No specific data.
	Predigested With Xho I
	XL1-Blue MRA E.coli Strain No specific data.
	XL1-Blue MRA (p2) E.coli Strain No specific data.
	pMF/BamH I Test Insert No specific data.

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

<b>Notes to physician</b>	:  Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	Wild-Type Lambda DNA c1857ind 1 Sam7 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	VCS257 E. coli Strain Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	Lambda FixII Vector Predigested With Xho I Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	XL1-Blue MRA E.coli Strain Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	XL1-Blue MRA (p2) E.coli Strain Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	pMF/BamH I Test Insert Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.



## Section 4. First aid measures

<b>Specific treatments</b>	:  Gigapack III XL - 11 packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain Lambda FixII Vector Predigested With Xho I XL1-Blue MRA E.coli Strain XL1-Blue MRA (p2) E.coli Strain pMF/BamH I Test Insert	No specific treatment. No specific treatment. No specific treatment. No specific treatment. No specific treatment. No specific treatment. No specific treatment.
<b>Protection of first-aiders</b>	:  Gigapack III XL - 11 packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain  Lambda FixII Vector Predigested With Xho I XL1-Blue MRA E.coli Strain  XL1-Blue MRA (p2) E.coli Strain pMF/BamH I Test Insert	No action shall be taken involving any personal risk or without suitable training. No action shall be taken involving any personal risk or without suitable training. No action shall be taken involving any personal risk or without suitable training. No action shall be taken involving any personal risk or without suitable training. No action shall be taken involving any personal risk or without suitable training. No action shall be taken involving any personal risk or without suitable training. 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>	:  Gigapack III XL - 11 packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain  Lambda FixII Vector Predigested With Xho I XL1-Blue MRA E.coli Strain  XL1-Blue MRA (p2) E.coli Strain pMF/BamH I Test Insert	Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	:  Gigapack III XL - 11 packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain Lambda FixII Vector Predigested With Xho I XL1-Blue MRA E.coli Strain XL1-Blue MRA (p2) E.coli Strain pMF/BamH I Test Insert	None known. None known. None known. None known. None known. None known. None known.



## Section 5. Firefighting measures

<b>Specific hazards arising from the chemical</b>	: Gigapack III XL - 11 packaging extract	In a fire or if heated, a pressure increase will occur and the container may burst.
	Wild-Type Lambda DNA c1857ind 1 Sam7	In a fire or if heated, a pressure increase will occur and the container may burst.
	VCS257 E. coli Strain	In a fire or if heated, a pressure increase will occur and the container may burst.
	Lambda FixII Vector Predigested With Xho I	In a fire or if heated, a pressure increase will occur and the container may burst.
	XL1-Blue MRA E.coli Strain	In a fire or if heated, a pressure increase will occur and the container may burst.
<b>Hazardous thermal decomposition products</b>	: Gigapack III XL - 11 packaging extract	In a fire or if heated, a pressure increase will occur and the container may burst.
	Wild-Type Lambda DNA c1857ind 1 Sam7	In a fire or if heated, a pressure increase will occur and the container may burst.
	VCS257 E. coli Strain	In a fire or if heated, a pressure increase will occur and the container may burst.
	Lambda FixII Vector Predigested With Xho I	In a fire or if heated, a pressure increase will occur and the container may burst.
	XL1-Blue MRA (p2) E.coli Strain	In a fire or if heated, a pressure increase will occur and the container may burst.
<b>Special protective actions for fire-fighters</b>	: Gigapack III XL - 11 packaging extract	Decomposition products may include the following materials: carbon dioxide carbon monoxide No specific data.
	Wild-Type Lambda DNA c1857ind 1 Sam7	Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds metal oxide/oxides No specific data.
	VCS257 E. coli Strain	Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds metal oxide/oxides No specific data.
	Lambda FixII Vector Predigested With Xho I	Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds metal oxide/oxides No specific data.
	XL1-Blue MRA E.coli Strain	Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds metal oxide/oxides No specific data.
	pMF/BamH I Test Insert	Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds metal oxide/oxides No specific data.

## Section 5. Firefighting measures



	Strain	from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
	pMF/BamH I Test Insert	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>	:  Gigapack III XL - 11 packaging extract	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Wild-Type Lambda DNA c1857ind 1 Sam7	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	VCS257 E. coli Strain	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Lambda FixII Vector Predigested With Xho I	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	XL1-Blue MRA E.coli Strain	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	XL1-Blue MRA (p2) E.coli Strain	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	pMF/BamH I Test Insert	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

<b>For non-emergency personnel</b>	:  Gigapack III XL - 11 packaging extract	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.
	Wild-Type Lambda DNA c1857ind 1 Sam7	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.
	VCS257 E. coli Strain	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 FixII Vector Predigested With Xho 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. Put on appropriate personal protective equipment.

## Section 6. Accidental release measures

XL1-Blue MRA E.coli Strain	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.
XL1-Blue MRA (p2) E.coli Strain	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.
pMF/BamH I Test Insert	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> :  Gigapack III XL - 11 packaging extract	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".
Wild-Type Lambda DNA c1857ind 1 Sam7	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".
VCS257 E. coli Strain	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 FixII Vector Predigested With Xho 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".
XL1-Blue MRA E.coli Strain	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".
XL1-Blue MRA (p2) E.coli Strain	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".
pMF/BamH I Test Insert	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> :  Gigapack III XL - 11 packaging extract	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).
Wild-Type Lambda DNA c1857ind 1 Sam7	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).
VCS257 E. coli Strain	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 FixII Vector	Avoid dispersal of spilt material and runoff and

## Section 6. Accidental release measures

Predigested With Xho I	contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
XL1-Blue MRA E.coli Strain	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).
XL1-Blue MRA (p2) E.coli Strain	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).
pMF/BamH I Test Insert	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



#### Methods for cleaning up

: Gigapack III XL - 11 packaging extract

Wild-Type Lambda DNA c1857ind 1 Sam7	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.
VCS257 E. coli Strain	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 FixII Vector Predigested With Xho I	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.
XL1-Blue MRA E.coli Strain	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.
XL1-Blue MRA (p2) E.coli Strain	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.
pMF/BamH I Test Insert	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

<b>Protective measures</b>	<ul style="list-style-type: none"> <li>:  Gigapack III XL - 11 packaging extract</li> <li>Wild-Type Lambda DNA</li> <li>c1857ind 1 Sam7</li> <li>VCS257 E. coli Strain</li>   <li>Lambda FixII Vector</li> <li>Predigested With Xho I</li> <li>XL1-Blue MRA E.coli Strain</li>   <li>XL1-Blue MRA (p2) E.coli Strain</li> <li>pMF/BamH I Test Insert</li> </ul>	<ul style="list-style-type: none"> <li>Put on appropriate personal protective equipment (see Section 8).</li> <li>Put on appropriate personal protective equipment (see Section 8).</li> <li>Put on appropriate personal protective equipment (see Section 8).</li> <li>Put on appropriate personal protective equipment (see Section 8).</li> <li>Put on appropriate personal protective equipment (see Section 8).</li> <li>Put on appropriate personal protective equipment (see Section 8).</li> <li>Put on appropriate personal protective equipment (see Section 8).</li> <li>Put on appropriate personal protective equipment (see Section 8).</li> </ul>
<b>Advice on general occupational hygiene</b>	<ul style="list-style-type: none"> <li>:  Gigapack III XL - 11 packaging extract</li>   <li>Wild-Type Lambda DNA</li> <li>c1857ind 1 Sam7</li>   <li>VCS257 E. coli Strain</li>   <li>Lambda FixII Vector</li> <li>Predigested With Xho I</li>   <li>XL1-Blue MRA E.coli Strain</li>   <li>XL1-Blue MRA (p2) E.coli Strain</li>   <li>pMF/BamH I Test Insert</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>Potentially biohazardous material. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.</li> <li>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.</li> <li>Potentially biohazardous material. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.</li> <li>Potentially biohazardous material. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.</li> <li>Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and</li> </ul>



## Section 7. Handling and storage

### Conditions for safe storage, including any incompatibilities

Gigapack III XL - 11 packaging extract

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.

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.

Wild-Type Lambda DNA c1857ind 1 Sam7

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.

VCS257 E. coli Strain

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.

Lambda FixII Vector Predigested With Xho I

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.

XL1-Blue MRA E.coli Strain

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.

XL1-Blue MRA (p2) E.coli Strain

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



## Section 7. Handling and storage

pMF/BamH I Test Insert

prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.  
 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.

## Section 8. Exposure controls and personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
<b>Gigapack III XL - 11 packaging extract</b> Sucrose	<b>Safe Work Australia (Australia, 1/2014).</b> TWA: 10 mg/m <sup>3</sup> 8 hours.
<b>VCS257 E. coli Strain</b> Glycerol	<b>Safe Work Australia (Australia, 1/2014).</b> TWA: 10 mg/m <sup>3</sup> 8 hours.
<b>XL1-Blue MRA E.coli Strain</b> Glycerol	<b>Safe Work Australia (Australia, 1/2014).</b> TWA: 10 mg/m <sup>3</sup> 8 hours.
<b>XL1-Blue MRA (p2) E.coli Strain</b> Glycerol	<b>Safe Work Australia (Australia, 1/2014).</b> TWA: 10 mg/m <sup>3</sup> 8 hours.

### Appropriate engineering controls

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

### Environmental exposure controls

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

### Individual protection measures

#### Hygiene measures

: Handle as biohazard material (Biosafety level 1). Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Eye/face protection

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

#### Skin protection

##### Hand protection

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

## Section 8. Exposure controls and personal protection

- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	:	<ul style="list-style-type: none"> <li>Gigapack III XL - 11 packaging extract Liquid.</li> <li>Wild-Type Lambda DNA c1857ind 1 Sam7 Liquid.</li> <li>VCS257 E. coli Strain Liquid.</li> <li>Lambda FixII Vector Liquid.</li> <li>Predigested With Xho I XL1-Blue MRA E.coli Strain Liquid.</li> <li>XL1-Blue MRA (p2) E.coli Strain Liquid.</li> <li>pMF/BamH I Test Insert Liquid.</li> </ul>
<b>Colour</b>	:	<ul style="list-style-type: none"> <li>Gigapack III XL - 11 packaging extract Not available.</li> <li>Wild-Type Lambda DNA c1857ind 1 Sam7 Not available.</li> <li>VCS257 E. coli Strain Not available.</li> <li>Lambda FixII Vector Not available.</li> <li>Predigested With Xho I XL1-Blue MRA E.coli Strain Not available.</li> <li>XL1-Blue MRA (p2) E.coli Strain Not available.</li> <li>pMF/BamH I Test Insert Not available.</li> </ul>
<b>Odour</b>	:	<ul style="list-style-type: none"> <li>Gigapack III XL - 11 packaging extract Not available.</li> <li>Wild-Type Lambda DNA c1857ind 1 Sam7 Not available.</li> <li>VCS257 E. coli Strain Not available.</li> <li>Lambda FixII Vector Not available.</li> <li>Predigested With Xho I XL1-Blue MRA E.coli Strain Not available.</li> <li>XL1-Blue MRA (p2) E.coli Strain Not available.</li> <li>pMF/BamH I Test Insert Not available.</li> </ul>
<b>Odour threshold</b>	:	<ul style="list-style-type: none"> <li>Gigapack III XL - 11 packaging extract Not available.</li> <li>Wild-Type Lambda DNA c1857ind 1 Sam7 Not available.</li> <li>VCS257 E. coli Strain Not available.</li> <li>Lambda FixII Vector Not available.</li> <li>Predigested With Xho I XL1-Blue MRA E.coli Strain Not available.</li> <li>XL1-Blue MRA (p2) E.coli Strain Not available.</li> <li>pMF/BamH I Test Insert Not available.</li> </ul>
<b>pH</b>	:	

## Section 9. Physical and chemical properties

		Gigapack III XL - 11 packaging extract	8
		Wild-Type Lambda DNA c1857ind 1 Sam7	7
		VCS257 E. coli Strain	7
		Lambda FixII Vector Predigested With Xho I	7.5
		XL1-Blue MRA E.coli Strain	7
		XL1-Blue MRA (p2) E.coli Strain	7
		pMF/BamH I Test Insert	8
<b>Melting point</b>	:	Gigapack III XL - 11 packaging extract	Not available.
		Wild-Type Lambda DNA c1857ind 1 Sam7	0°C (32°F)
		VCS257 E. coli Strain	Not available.
		Lambda FixII Vector Predigested With Xho I	0°C (32°F)
		XL1-Blue MRA E.coli Strain	Not available.
		XL1-Blue MRA (p2) E.coli Strain	Not available.
		pMF/BamH I Test Insert	0°C (32°F)
<b>Boiling point</b>	:	Gigapack III XL - 11 packaging extract	Not available.
		Wild-Type Lambda DNA c1857ind 1 Sam7	100°C (212°F)
		VCS257 E. coli Strain	Not available.
		Lambda FixII Vector Predigested With Xho I	100°C (212°F)
		XL1-Blue MRA E.coli Strain	Not available.
		XL1-Blue MRA (p2) E.coli Strain	Not available.
		pMF/BamH I Test Insert	100°C (212°F)
<b>Flash point</b>	:	Gigapack III XL - 11 packaging extract	Not available.
		Wild-Type Lambda DNA c1857ind 1 Sam7	Not available.
		VCS257 E. coli Strain	Not available.
		Lambda FixII Vector Predigested With Xho I	Not available.
		XL1-Blue MRA E.coli Strain	Not available.
		XL1-Blue MRA (p2) E.coli Strain	Not available.
		pMF/BamH I Test Insert	Not available.
<b>Evaporation rate</b>	:	Gigapack III XL - 11 packaging extract	Not available.
		Wild-Type Lambda DNA c1857ind 1 Sam7	Not available.
		VCS257 E. coli Strain	Not available.
		Lambda FixII Vector Predigested With Xho I	Not available.
		XL1-Blue MRA E.coli Strain	Not available.
		XL1-Blue MRA (p2) E.coli Strain	Not available.
		pMF/BamH I Test Insert	Not available.

## Section 9. Physical and chemical properties

<b>Flammability (solid, gas)</b>	: <input checked="" type="checkbox"/> Gigapack III XL - 11 packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain Lambda FixII Vector Predigested With Xho I XL1-Blue MRA E.coli Strain XL1-Blue MRA (p2) E.coli Strain pMF/BamH I Test Insert	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.
<b>Lower and upper explosive (flammable) limits</b>	: <input checked="" type="checkbox"/> Gigapack III XL - 11 packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain Lambda FixII Vector Predigested With Xho I XL1-Blue MRA E.coli Strain XL1-Blue MRA (p2) E.coli Strain pMF/BamH I Test Insert	Not available. Not available. Not available. Not available. Not available. Not available. Not available.
<b>Vapour pressure</b>	: <input checked="" type="checkbox"/> Gigapack III XL - 11 packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain Lambda FixII Vector Predigested With Xho I XL1-Blue MRA E.coli Strain XL1-Blue MRA (p2) E.coli Strain pMF/BamH I Test Insert	Not available. Not available. Not available. Not available. Not available. Not available. Not available.
<b>Vapour density</b>	: <input checked="" type="checkbox"/> Gigapack III XL - 11 packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain Lambda FixII Vector Predigested With Xho I XL1-Blue MRA E.coli Strain XL1-Blue MRA (p2) E.coli Strain pMF/BamH I Test Insert	Not available. Not available. Not available. Not available. Not available. Not available. Not available.
<b>Relative density</b>	: <input checked="" type="checkbox"/> Gigapack III XL - 11 packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain Lambda FixII Vector Predigested With Xho I XL1-Blue MRA E.coli Strain XL1-Blue MRA (p2) E.coli Strain pMF/BamH I Test Insert	Not available. Not available. Not available. Not available. Not available. Not available. Not available.

## Section 9. Physical and chemical properties

<b>Solubility</b>	:  Gigapack III XL - 11 packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain  Lambda FixII Vector Predigested With Xho I XL1-Blue MRA E.coli Strain  XL1-Blue MRA (p2) E.coli Strain pMF/BamH I Test Insert	Easily soluble in the following materials: cold water and hot water. Easily soluble in the following materials: cold water and hot water. Easily soluble in the following materials: cold water and hot water. Easily soluble in the following materials: cold water and hot water. Soluble in the following materials: cold water and hot water. Soluble in the following materials: cold water and hot water. Easily soluble in the following materials: cold water and hot water.
<b>Partition coefficient: n-octanol/water</b>	:  Gigapack III XL - 11 packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain Lambda FixII Vector Predigested With Xho I XL1-Blue MRA E.coli Strain XL1-Blue MRA (p2) E.coli Strain pMF/BamH I Test Insert	Not available. Not available. Not available. Not available. Not available. Not available. Not available.
<b>Auto-ignition temperature</b>	:  Gigapack III XL - 11 packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain Lambda FixII Vector Predigested With Xho I XL1-Blue MRA E.coli Strain XL1-Blue MRA (p2) E.coli Strain pMF/BamH I Test Insert	Not available. Not available. Not available. Not available. Not available. Not available. Not available.
<b>Decomposition temperature</b>	:  Gigapack III XL - 11 packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain Lambda FixII Vector Predigested With Xho I XL1-Blue MRA E.coli Strain XL1-Blue MRA (p2) E.coli Strain pMF/BamH I Test Insert	Not available. Not available. Not available. Not available. Not available. Not available. Not available.
<b>Viscosity</b>	:  Gigapack III XL - 11 packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain Lambda FixII Vector Predigested With Xho I XL1-Blue MRA E.coli Strain XL1-Blue MRA (p2) E.coli Strain pMF/BamH I Test Insert	Not available. Not available. Not available. Not available. Not available. Not available. Not available.

## Section 10. Stability and reactivity

<b>Reactivity</b>	<p>:  Gigapack III XL - 11 packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain</p> <p>Lambda FixII Vector Predigested With Xho I XL1-Blue MRA E.coli Strain</p> <p>XL1-Blue MRA (p2) E.coli Strain pMF/BamH I Test Insert</p>	<p>No specific test data related to reactivity available for this product or its ingredients.</p> <p>No specific test data related to reactivity available for this product or its ingredients.</p> <p>No specific test data related to reactivity available for this product or its ingredients.</p> <p>No specific test data related to reactivity available for this product or its ingredients.</p> <p>No specific test data related to reactivity available for this product or its ingredients.</p> <p>No specific test data related to reactivity available for this product or its ingredients.</p> <p>No specific test data related to reactivity available for this product or its ingredients.</p>
<b>Chemical stability</b>	<p>:  Gigapack III XL - 11 packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain Lambda FixII Vector Predigested With Xho I XL1-Blue MRA E.coli Strain XL1-Blue MRA (p2) E.coli Strain pMF/BamH I Test Insert</p>	<p>The product is stable.</p> <p>The product is stable.</p> <p>The product is stable.</p> <p>The product is stable.</p> <p>The product is stable.</p> <p>The product is stable.</p> <p>The product is stable.</p>
<b>Possibility of hazardous reactions</b>	<p>:  Gigapack III XL - 11 packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain Lambda FixII Vector Predigested With Xho I XL1-Blue MRA E.coli Strain XL1-Blue MRA (p2) E.coli Strain pMF/BamH I Test Insert</p>	<p>Under normal conditions of storage and use, hazardous reactions will not occur.</p> <p>Under normal conditions of storage and use, hazardous reactions will not occur.</p> <p>Under normal conditions of storage and use, hazardous reactions will not occur.</p> <p>Under normal conditions of storage and use, hazardous reactions will not occur.</p> <p>Under normal conditions of storage and use, hazardous reactions will not occur.</p> <p>Under normal conditions of storage and use, hazardous reactions will not occur.</p> <p>Under normal conditions of storage and use, hazardous reactions will not occur.</p> <p>Under normal conditions of storage and use, hazardous reactions will not occur.</p>
<b>Conditions to avoid</b>	<p>:  Gigapack III XL - 11 packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain Lambda FixII Vector Predigested With Xho I XL1-Blue MRA E.coli Strain XL1-Blue MRA (p2) E.coli Strain pMF/BamH I Test Insert</p>	<p>No specific data.</p> <p>No specific data.</p> <p>No specific data.</p> <p>No specific data.</p> <p>No specific data.</p> <p>No specific data.</p> <p>No specific data.</p>
<b>Incompatible materials</b>	<p>:  Gigapack III XL - 11 packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain Lambda FixII Vector Predigested With Xho I</p>	<p>May react or be incompatible with oxidising materials.</p> <p>May react or be incompatible with oxidising materials.</p> <p>May react or be incompatible with oxidising materials.</p> <p>May react or be incompatible with oxidising materials.</p>



## Section 10. Stability and reactivity

	XL1-Blue MRA E.coli Strain	May react or be incompatible with oxidising materials.
	XL1-Blue MRA (p2) E.coli Strain	May react or be incompatible with oxidising materials.
	pMF/BamH I Test Insert	May react or be incompatible with oxidising materials.
<b>Hazardous decomposition products</b>	: <b>Gigapack III XL - 11 packaging extract</b>	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Wild-Type Lambda DNA c1857ind 1 Sam7	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	VCS257 E. coli Strain	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Lambda FixII Vector Predigested With Xho I	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	XL1-Blue MRA E.coli Strain	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	XL1-Blue MRA (p2) E.coli Strain	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	pMF/BamH I Test Insert	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>Gigapack III XL - 11 packaging extract</b> Sucrose	LD50 Oral	Rat	29700 mg/kg	-
<b>VCS257 E. coli Strain</b> Glycerol	LD50 Oral	Rat	12600 mg/kg	-
<b>XL1-Blue MRA E.coli Strain</b> Glycerol	LD50 Oral	Rat	12600 mg/kg	-
<b>XL1-Blue MRA (p2) E.coli Strain</b> Glycerol	LD50 Oral	Rat	12600 mg/kg	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
<b>VCS257 E. coli Strain</b> Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
<b>XL1-Blue MRA E.coli Strain</b> Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-

## Section 11. Toxicological information

XL1-Blue MRA (p2) E.coli Strain Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-

### Sensitisation

Not available.

### Mutagenicity

Not available.

### Carcinogenicity

Not available.

### Reproductive toxicity

Not available.

### Teratogenicity

Not available.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard




Not available.

<b>Information on likely routes of exposure</b>	: Gigapack III XL - 11 packaging extract	Not available.
	Wild-Type Lambda DNA	Not available.
	c1857ind 1 Sam7	
	VCS257 E. coli Strain	Routes of entry anticipated: Oral, Dermal, Inhalation.
	Lambda FixII Vector	Not available.
	Predigested With Xho I	
	XL1-Blue MRA E.coli Strain	Routes of entry anticipated: Oral, Dermal, Inhalation.
	XL1-Blue MRA (p2) E.coli Strain	Routes of entry anticipated: Oral, Dermal, Inhalation.
	Strain	
	pMF/BamH I Test Insert	Not available.



### Potential acute health effects

<b>Eye contact</b>	: Gigapack III XL - 11 packaging extract	No known significant effects or critical hazards.
	Wild-Type Lambda DNA	No known significant effects or critical hazards.
	c1857ind 1 Sam7	
	VCS257 E. coli Strain	No known significant effects or critical hazards.
	Lambda FixII Vector	No known significant effects or critical hazards.
	Predigested With Xho I	
	XL1-Blue MRA E.coli Strain	No known significant effects or critical hazards.
	XL1-Blue MRA (p2) E.coli Strain	No known significant effects or critical hazards.
	Strain	
	pMF/BamH I Test Insert	No known significant effects or critical hazards.

## Section 11. Toxicological information

<b>Inhalation</b>	:  Gigapack III XL - 11 packaging extract	No known significant effects or critical hazards.
	Wild-Type Lambda DNA	No known significant effects or critical hazards.
	c1857ind 1 Sam7	No known significant effects or critical hazards.
	VCS257 E. coli Strain	No known significant effects or critical hazards.
	Lambda FixII Vector	No known significant effects or critical hazards.
	Predigested With Xho I	No known significant effects or critical hazards.
	XL1-Blue MRA E.coli Strain	No known significant effects or critical hazards.
	XL1-Blue MRA (p2) E.coli Strain	No known significant effects or critical hazards.
	pMF/BamH I Test Insert	No known significant effects or critical hazards.
<b>Skin contact</b>	:  Gigapack III XL - 11 packaging extract	No known significant effects or critical hazards.
	Wild-Type Lambda DNA	No known significant effects or critical hazards.
	c1857ind 1 Sam7	No known significant effects or critical hazards.
	VCS257 E. coli Strain	No known significant effects or critical hazards.
	Lambda FixII Vector	No known significant effects or critical hazards.
	Predigested With Xho I	No known significant effects or critical hazards.
	XL1-Blue MRA E.coli Strain	No known significant effects or critical hazards.
	XL1-Blue MRA (p2) E.coli Strain	No known significant effects or critical hazards.
	pMF/BamH I Test Insert	No known significant effects or critical hazards.
<b>Ingestion</b>	:  Gigapack III XL - 11 packaging extract	No known significant effects or critical hazards.
	Wild-Type Lambda DNA	No known significant effects or critical hazards.
	c1857ind 1 Sam7	No known significant effects or critical hazards.
	VCS257 E. coli Strain	No known significant effects or critical hazards.
	Lambda FixII Vector	No known significant effects or critical hazards.
	Predigested With Xho I	No known significant effects or critical hazards.
	XL1-Blue MRA E.coli Strain	No known significant effects or critical hazards.
	XL1-Blue MRA (p2) E.coli Strain	No known significant effects or critical hazards.
	pMF/BamH I Test Insert	No known significant effects or critical hazards.

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

<b>Eye contact</b>	:  Gigapack III XL - 11 packaging extract	No specific data.
	Wild-Type Lambda DNA	No specific data.
	c1857ind 1 Sam7	No specific data.
	VCS257 E. coli Strain	No specific data.
	Lambda FixII Vector	No specific data.
	Predigested With Xho I	No specific data.
	XL1-Blue MRA E.coli Strain	No specific data.
	XL1-Blue MRA (p2) E.coli Strain	No specific data.
	pMF/BamH I Test Insert	No specific data.
<b>Inhalation</b>	:  Gigapack III XL - 11 packaging extract	No specific data.
	Wild-Type Lambda DNA	No specific data.
	c1857ind 1 Sam7	No specific data.
	VCS257 E. coli Strain	No specific data.
	Lambda FixII Vector	No specific data.
	Predigested With Xho I	No specific data.
	XL1-Blue MRA E.coli Strain	No specific data.
	XL1-Blue MRA (p2) E.coli Strain	No specific data.
	pMF/BamH I Test Insert	No specific data.

## Section 11. Toxicological information

<b>Skin contact</b>	: Gigapack III XL - 11 packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain Lambda FixII Vector Predigested With Xho I XL1-Blue MRA E.coli Strain XL1-Blue MRA (p2) E.coli Strain pMF/BamH I Test Insert	No specific data. No specific data. No specific data. No specific data. No specific data. No specific data. No specific data. No specific data.
<b>Ingestion</b>	: Gigapack III XL - 11 packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain Lambda FixII Vector Predigested With Xho I XL1-Blue MRA E.coli Strain XL1-Blue MRA (p2) E.coli Strain pMF/BamH I Test Insert	No specific data. No specific data. No specific data. No specific data. No specific data. No specific data. No specific data. No specific data.

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

#### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Potential chronic health effects

Not available.

<b>General</b>	: Gigapack III XL - 11 packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain Lambda FixII Vector Predigested With Xho I XL1-Blue MRA E.coli Strain XL1-Blue MRA (p2) E.coli Strain pMF/BamH I Test Insert	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: Gigapack III XL - 11 packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain Lambda FixII Vector Predigested With Xho I XL1-Blue MRA E.coli Strain XL1-Blue MRA (p2) E.coli Strain pMF/BamH I Test Insert	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

## Section 11. Toxicological information

<b>Mutagenicity</b>	:	Gigapack III XL - 11 packaging extract	No known significant effects or critical hazards.
		Wild-Type Lambda DNA	No known significant effects or critical hazards.
		c1857ind 1 Sam7	
		VCS257 E. coli Strain	No known significant effects or critical hazards.
		Lambda FixII Vector	No known significant effects or critical hazards.
		Predigested With Xho I	
		XL1-Blue MRA E.coli Strain	No known significant effects or critical hazards.
		XL1-Blue MRA (p2) E.coli Strain	No known significant effects or critical hazards.
		pMF/BamH I Test Insert	No known significant effects or critical hazards.
<b>Teratogenicity</b>	:	Gigapack III XL - 11 packaging extract	No known significant effects or critical hazards.
		Wild-Type Lambda DNA	No known significant effects or critical hazards.
		c1857ind 1 Sam7	
		VCS257 E. coli Strain	No known significant effects or critical hazards.
		Lambda FixII Vector	No known significant effects or critical hazards.
		Predigested With Xho I	
		XL1-Blue MRA E.coli Strain	No known significant effects or critical hazards.
		XL1-Blue MRA (p2) E.coli Strain	No known significant effects or critical hazards.
		pMF/BamH I Test Insert	No known significant effects or critical hazards.
<b>Developmental effects</b>	:	Gigapack III XL - 11 packaging extract	No known significant effects or critical hazards.
		Wild-Type Lambda DNA	No known significant effects or critical hazards.
		c1857ind 1 Sam7	
		VCS257 E. coli Strain	No known significant effects or critical hazards.
		Lambda FixII Vector	No known significant effects or critical hazards.
		Predigested With Xho I	
		XL1-Blue MRA E.coli Strain	No known significant effects or critical hazards.
		XL1-Blue MRA (p2) E.coli Strain	No known significant effects or critical hazards.
		pMF/BamH I Test Insert	No known significant effects or critical hazards.
<b>Fertility effects</b>	:	Gigapack III XL - 11 packaging extract	No known significant effects or critical hazards.
		Wild-Type Lambda DNA	No known significant effects or critical hazards.
		c1857ind 1 Sam7	
		VCS257 E. coli Strain	No known significant effects or critical hazards.
		Lambda FixII Vector	No known significant effects or critical hazards.
		Predigested With Xho I	
		XL1-Blue MRA E.coli Strain	No known significant effects or critical hazards.
		XL1-Blue MRA (p2) E.coli Strain	No known significant effects or critical hazards.
		pMF/BamH I Test Insert	No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Not available.

## Section 12. Ecological information

### Toxicity

## Section 12. Ecological information

Product/ingredient name	Result	Species	Exposure
<b>VCS257 E. coli Strain</b> Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
<b>XL1-Blue MRA E.coli Strain</b> Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
<b>XL1-Blue MRA (p2) E.coli Strain</b> Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours

### Persistence and degradability

Not available.

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<b>Gigapack III XL - 11 packaging extract</b> Sucrose	-3.7	-	low
<b>VCS257 E. coli Strain</b> Glycerol	-1.76	-	low
<b>XL1-Blue MRA E.coli Strain</b> Glycerol	-1.76	-	low
<b>XL1-Blue MRA (p2) E.coli Strain</b> Glycerol	-1.76	-	low

### 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. 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

### Regulatory 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



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

No listed substance

**Australia inventory (AICS)** : Not determined.

### 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 Inform Consent (PIC)

Not listed.

#### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### International lists

#### National inventory

- Canada** : At least one component is not listed in DSL but all such components are listed in NDSL.
- China** : Not determined.
- Europe** : All components are listed or exempted.
- Japan** : **Japan inventory (ENCS):** Not determined.  
**Japan inventory (ISHL):** Not determined.
- Malaysia** :  Not determined.
- New Zealand** :  All components are listed or exempted.
- Philippines** :  Not determined.
- Republic of Korea** :  Not determined.
- Taiwan** :  All components are listed or exempted.
- Turkey** :  Not determined.
- United States** : All components are listed or exempted.

## Section 16. Any other relevant information

### History

**Date of issue/Date of revision** : 29/02/2016

**Date of previous issue** : 30/04/2014.

**Version** : 3.01

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

### Procedure used to derive the classification

Classification	Justification
Not classified.	

**References** : Not available.

Indicates information that has changed from previously issued version.

### Notice to reader

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