

# SAFETY DATA SHEET



ZAP Express Predigested Gigapack III Gold Cloning Kit, Part Number 239614

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

### 1.1 Product identifier

<b>Product name</b>	: ZAP Express Predigested Gigapack III Gold Cloning Kit, Part Number 239614		
<b>Part no. (chemical kit)</b>	: 239614		
<b>Part no.</b>	: Gigapack III packaging extract	200201-41	
	Wild-Type Lambda DNA c1857ind 1 Sam7	246203-51	
	VCS257 E. coli Strain	200256-51	
	ZAP Express vector	239211-51	
	R408 Interference-Resistant Helper Phage	200252-81	
	ExAssist Interference-Resistant Helper Phage	200253-81	
	XL1-Blue MRF <sup>+</sup> E.coli Strain	200301-81	
	XL0LR E. coli Strain	200304-81	
	pRho/EcoR I Test Insert	210200-51	

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

<b>Material uses</b>	: Analytical reagent.		
	Gigapack III packaging extract	0.275 ml (11 x 0.025 ml )	
	Wild-Type Lambda DNA c1857ind 1 Sam7	0.005 ml (1.05 µg 0.21 µg/µl)	
	VCS257 E. coli Strain	1 ml	
	ZAP Express vector	0.01 ml	
	R408 Interference-Resistant Helper Phage	1 ml	
	ExAssist Interference-Resistant Helper Phage	1 ml ( >1 X E10 pfu/ml)	
	XL1-Blue MRF <sup>+</sup> E.coli Strain	0.5 ml (500 µl)	
	XL0LR E. coli Strain	0.5 ml (500 µl)	
	pRho/EcoR I Test Insert	1.25 µg (1.25 µg 0.25 µg/µl)	

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

Agilent Technologies Manufacturing GmbH & Co. KG  
Hewlett-Packard-Str. 8  
76337 Waldbronn  
Germany  
0800 603 1000

**e-mail address of person responsible for this SDS** : pdl-msds\_author@agilent.com

### 1.4 Emergency telephone number

**Emergency telephone number (with hours of operation)** : CHEMTREC®: +(44)-870-8200418

ZAP Express Predigested Gigapack III Gold Cloning Kit, Part Number 239614

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

<b>Product definition</b>	:	Gigapack III packaging extract	Mixture
		Wild-Type Lambda DNA c1857ind 1 Sam7	Mixture
		VCS257 E. coli Strain	Mixture
		ZAP Express vector	Mixture
		R408 Interference-Resistant Helper Phage	Mixture
		ExAssist Interference-Resistant Helper Phage	Mixture
		XL1-Blue MRF <sup>+</sup> E.coli Strain	Mixture
		XLOLR E. coli Strain	Mixture
		pRheo/EcoR I Test Insert	Mixture

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

Not classified.

<b>Ingredients of unknown toxicity</b>	:	Gigapack III packaging extract	Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 1 - 10%
		VCS257 E. coli Strain	Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 10 - 30%
		XL1-Blue MRF <sup>+</sup> E.coli Strain	Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 10 - 30%
		XLOLR E. coli Strain	Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 10 - 30%

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

See Section 11 for more detailed information on health effects and symptoms.

### 2.2 Label elements

<b>Signal word</b>	:	Gigapack III packaging extract	No signal word.
		Wild-Type Lambda DNA c1857ind 1 Sam7	No signal word.
		VCS257 E. coli Strain	No signal word.
		ZAP Express vector	No signal word.
		R408 Interference-Resistant Helper Phage	No signal word.
		ExAssist Interference-Resistant Helper Phage	No signal word.
		XL1-Blue MRF <sup>+</sup> E.coli Strain	No signal word.
		XLOLR E. coli Strain	No signal word.
		pRheo/EcoR I Test Insert	No signal word.
<b>Hazard statements</b>	:	Gigapack III 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.
		ZAP Express vector	No known significant effects or critical hazards.
		R408 Interference-Resistant Helper Phage	No known significant effects or critical hazards.
		ExAssist Interference-Resistant Helper Phage	No known significant effects or critical hazards.
		XL1-Blue MRF <sup>+</sup> E.coli Strain	No known significant effects or critical hazards.
		XLOLR E. coli Strain	No known significant effects or critical hazards.
		pRheo/EcoR I Test Insert	No known significant effects or critical hazards.

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## SECTION 2: Hazards identification

### Precautionary statements

<b>Prevention</b>	:	Gigapack III packaging extract	Not applicable.
		Wild-Type Lambda DNA c1857ind 1 Sam7	Not applicable.
		VCS257 E. coli Strain	Not applicable.
		ZAP Express vector	Not applicable.
		R408 Interference-Resistant Helper Phage	Not applicable.
		ExAssist Interference-Resistant Helper Phage	Not applicable.
		XL1-Blue MRF' E.coli Strain	Not applicable.
		XL0LR E. coli Strain	Not applicable.
		pRho/EcoR I Test Insert	Not applicable.
<b>Response</b>	:	Gigapack III packaging extract	Not applicable.
		Wild-Type Lambda DNA c1857ind 1 Sam7	Not applicable.
		VCS257 E. coli Strain	Not applicable.
		ZAP Express vector	Not applicable.
		R408 Interference-Resistant Helper Phage	Not applicable.
		ExAssist Interference-Resistant Helper Phage	Not applicable.
		XL1-Blue MRF' E.coli Strain	Not applicable.
		XL0LR E. coli Strain	Not applicable.
		pRho/EcoR I Test Insert	Not applicable.
<b>Storage</b>	:	Gigapack III packaging extract	Not applicable.
		Wild-Type Lambda DNA c1857ind 1 Sam7	Not applicable.
		VCS257 E. coli Strain	Not applicable.
		ZAP Express vector	Not applicable.
		R408 Interference-Resistant Helper Phage	Not applicable.
		ExAssist Interference-Resistant Helper Phage	Not applicable.
		XL1-Blue MRF' E.coli Strain	Not applicable.
		XL0LR E. coli Strain	Not applicable.
		pRho/EcoR I Test Insert	Not applicable.
<b>Disposal</b>	:	Gigapack III packaging extract	Not applicable.
		Wild-Type Lambda DNA c1857ind 1 Sam7	Not applicable.
		VCS257 E. coli Strain	Not applicable.
		ZAP Express vector	Not applicable.
		R408 Interference-Resistant Helper Phage	Not applicable.
		ExAssist Interference-Resistant Helper Phage	Not applicable.
		XL1-Blue MRF' E.coli Strain	Not applicable.
		XL0LR E. coli Strain	Not applicable.
		pRho/EcoR I Test Insert	Not applicable.
<b>Hazardous ingredients</b>	:	VCS257 E. coli Strain	Not applicable.
		XL1-Blue MRF' E.coli Strain	Not applicable.
		XL0LR E. coli Strain	Not applicable.

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**SECTION 2: Hazards identification**

<b>Supplemental label elements</b>	: Gigapack III packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain ZAP Express vector R408 Interference-Resistant Helper Phage ExAssist Interference-Resistant Helper Phage XL1-Blue MRF' E.coli Strain XLOLR E. coli Strain pRho/EcoR I Test Insert	Contains 2-mercaptoethanol. May produce an allergic reaction. Safety data sheet available on request. Not applicable. Safety data sheet available on request. Not applicable. Not applicable. Not applicable. Safety data sheet available on request. Safety data sheet available on request. Not applicable.
<b>Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</b>	: Gigapack III packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain ZAP Express vector R408 Interference-Resistant Helper Phage ExAssist Interference-Resistant Helper Phage XL1-Blue MRF' E.coli Strain XLOLR E. coli Strain pRho/EcoR I Test Insert	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.

**Special packaging requirements**

<b>Tactile warning of danger</b>	: Gigapack III packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain ZAP Express vector R408 Interference-Resistant Helper Phage ExAssist Interference-Resistant Helper Phage XL1-Blue MRF' E.coli Strain XLOLR E. coli Strain pRho/EcoR I Test Insert	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.
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**2.3 Other hazards**

<b>Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII</b>	: Gigapack III packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain  ZAP Express vector  R408 Interference-Resistant Helper Phage ExAssist Interference-Resistant Helper Phage XL1-Blue MRF' E.coli Strain XLOLR E. coli Strain	This mixture does not contain any substances that are assessed to be a PBT or a vPvB. This mixture does not contain any substances that are assessed to be a PBT or a vPvB. This mixture does not contain any substances that are assessed to be a PBT or a vPvB. This mixture does not contain any substances that are assessed to be a PBT or a vPvB. This mixture does not contain any substances that are assessed to be a PBT or a vPvB. This mixture does not contain any substances that are assessed to be a PBT or a vPvB. This mixture does not contain any substances that are assessed to be a PBT or a vPvB. This mixture does not contain any substances that are assessed to be a PBT or a vPvB. This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
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## SECTION 2: Hazards identification

pRheo/EcoR I Test Insert This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

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

: Gigapack III packaging extract	None known.
Wild-Type Lambda DNA c1857ind 1 Sam7	None known.
VCS257 E. coli Strain	None known.
ZAP Express vector	None known.
R408 Interference-Resistant Helper Phage	None known.
ExAssist Interference-Resistant Helper Phage	None known.
XL1-Blue MRF' E.coli Strain	None known.
XLOLR E. coli Strain	None known.
pRheo/EcoR I Test Insert	None known.

## SECTION 3: Composition/information on ingredients

**3.1 Substances**

: Gigapack III packaging extract	Mixture
Wild-Type Lambda DNA c1857ind 1 Sam7	Mixture
VCS257 E. coli Strain	Mixture
ZAP Express vector	Mixture
R408 Interference-Resistant Helper Phage	Mixture
ExAssist Interference-Resistant Helper Phage	Mixture
XL1-Blue MRF' E.coli Strain	Mixture
XLOLR E. coli Strain	Mixture
pRheo/EcoR I Test Insert	Mixture

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Type
<b>Gigapack III packaging extract</b> Sucrose	REACH #: Annex IV EC: 200-334-9 CAS: 57-50-1	≤10	Not classified.	[2]
<b>VCS257 E. coli Strain</b> Glycerol	REACH #: Annex V EC: 200-289-5 CAS: 56-81-5	≥10 - ≤25	Not classified.	[2]
Sodium chloride	EC: 231-598-3 CAS: 7647-14-5	≤3	Eye Irrit. 2, H319	[1]
<b>XL1-Blue MRF' E.coli Strain</b> Glycerol	REACH #: Annex V EC: 200-289-5 CAS: 56-81-5	≥10 - ≤25	Not classified.	[2]
Sodium chloride	EC: 231-598-3 CAS: 7647-14-5	≤3	Eye Irrit. 2, H319	[1]
<b>XLOLR E. coli Strain</b> Glycerol	REACH #: Annex V EC: 200-289-5 CAS: 56-81-5	≥10 - ≤25	Not classified.	[2]
Sodium chloride	EC: 231-598-3 CAS: 7647-14-5	≤3	Eye Irrit. 2, H319	[1]
			<b>See Section 16 for the full text of the H statements declared above.</b>	

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## SECTION 3: Composition/information on ingredients

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.

### Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern
- [6] Additional disclosure due to company policy

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### Eye contact

: Gigapack III packaging extract	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.
ZAP Express vector	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.
R408 Interference-Resistant Helper Phage	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.
ExAssist Interference-Resistant Helper Phage	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 MRF' 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.
XLOLR 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.
pRho/EcoR 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.

#### Inhalation

: Gigapack III packaging extract	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.
ZAP Express vector	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
R408 Interference-Resistant Helper Phage	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
ExAssist Interference-Resistant Helper Phage	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
XL1-Blue MRF' E.coli Strain	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
XLOLR E. coli Strain	Remove victim to fresh air and keep at rest in a position

**SECTION 4: First aid measures**

		comfortable for breathing. Get medical attention if symptoms occur.
	pRheo/EcoR 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>	: Gigapack III packaging extract	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.
	ZAP Express vector	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	R408 Interference-Resistant Helper Phage	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	ExAssist Interference-Resistant Helper Phage	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	XL1-Blue MRF' E.coli Strain	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	XL0LR E. coli Strain	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	pRheo/EcoR I Test Insert	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
<b>Ingestion</b>	: Gigapack III packaging extract	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.
	ZAP Express vector	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.
	R408 Interference-Resistant Helper Phage	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.

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ExAssist Interference-Resistant Helper Phage	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 MRF' 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.
XL0LR 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.
pRho/EcoR 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.
<b>Protection of first-aiders</b> : Gigapack III packaging extract	No action shall be taken involving any personal risk or without suitable training.
Wild-Type Lambda DNA	No action shall be taken involving any personal risk or without suitable training.
c1857ind 1 Sam7	No action shall be taken involving any personal risk or without suitable training.
VCS257 E. coli Strain	No action shall be taken involving any personal risk or without suitable training.
ZAP Express vector	No action shall be taken involving any personal risk or without suitable training.
R408 Interference-Resistant Helper Phage	No action shall be taken involving any personal risk or without suitable training.
ExAssist Interference-Resistant Helper Phage	No action shall be taken involving any personal risk or without suitable training.
XL1-Blue MRF' E.coli Strain	No action shall be taken involving any personal risk or without suitable training.
XL0LR E. coli Strain	No action shall be taken involving any personal risk or without suitable training.
pRho/EcoR I Test Insert	No action shall be taken involving any personal risk or without suitable training.

**4.2 Most important symptoms and effects, both acute and delayed**

**Potential acute health effects**

<b>Eye contact</b>	: Gigapack III 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.
	ZAP Express vector	No known significant effects or critical hazards.
	R408 Interference-Resistant Helper Phage	No known significant effects or critical hazards.
	ExAssist Interference-Resistant Helper Phage	No known significant effects or critical hazards.
	XL1-Blue MRF' E.coli Strain	No known significant effects or critical hazards.
	XL0LR E. coli Strain	No known significant effects or critical hazards.
	pRho/EcoR I Test Insert	No known significant effects or critical hazards.

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<b>Inhalation</b>	:	Gigapack III packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain ZAP Express vector R408 Interference-Resistant Helper Phage ExAssist Interference-Resistant Helper Phage XL1-Blue MRF' E.coli Strain XL0LR E. coli Strain pRho/EcoR 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. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Skin contact</b>	:	Gigapack III packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain ZAP Express vector R408 Interference-Resistant Helper Phage ExAssist Interference-Resistant Helper Phage XL1-Blue MRF' E.coli Strain XL0LR E. coli Strain pRho/EcoR 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. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Ingestion</b>	:	Gigapack III packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain ZAP Express vector R408 Interference-Resistant Helper Phage ExAssist Interference-Resistant Helper Phage XL1-Blue MRF' E.coli Strain XL0LR E. coli Strain pRho/EcoR 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. No known significant effects or critical hazards. No known significant effects or critical hazards.

**Over-exposure signs/symptoms**

<b>Eye contact</b>	:	Gigapack III packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain ZAP Express vector R408 Interference-Resistant Helper Phage ExAssist Interference-Resistant Helper Phage XL1-Blue MRF' E.coli Strain XL0LR E. coli Strain pRho/EcoR 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. No specific data.
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<b>Inhalation</b>	:	Gigapack III packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain ZAP Express vector R408 Interference-Resistant Helper Phage ExAssist Interference-Resistant Helper Phage XL1-Blue MRF' E.coli Strain XLOLR E. coli Strain pRho/EcoR 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. No specific data.
<b>Skin contact</b>	:	Gigapack III packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain ZAP Express vector R408 Interference-Resistant Helper Phage ExAssist Interference-Resistant Helper Phage XL1-Blue MRF' E.coli Strain XLOLR E. coli Strain pRho/EcoR 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. No specific data.
<b>Ingestion</b>	:	Gigapack III packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain ZAP Express vector R408 Interference-Resistant Helper Phage ExAssist Interference-Resistant Helper Phage XL1-Blue MRF' E.coli Strain XLOLR E. coli Strain pRho/EcoR 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. No specific data.

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

<b>Notes to physician</b>	:	Gigapack III packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain  ZAP Express vector  R408 Interference-Resistant Helper Phage ExAssist Interference-Resistant Helper Phage XL1-Blue MRF' E.coli Strain XLOLR E. coli Strain  pRho/EcoR I Test Insert	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.  Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.  Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.  Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
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**SECTION 4: First aid measures**

		immediately if large quantities have been ingested or inhaled.
<b>Specific treatments</b>	: Gigapack III packaging extract	No specific treatment.
	Wild-Type Lambda DNA c1857ind 1 Sam7	No specific treatment.
	VCS257 E. coli Strain	No specific treatment.
	ZAP Express vector	No specific treatment.
	R408 Interference-Resistant Helper Phage	No specific treatment.
	ExAssist Interference-Resistant Helper Phage	No specific treatment.
	XL1-Blue MRF' E.coli Strain	No specific treatment.
	XLOLR E. coli Strain	No specific treatment.
	pRho/EcoR I Test Insert	No specific treatment.

**SECTION 5: Firefighting measures**

**5.1 Extinguishing media**

<b>Suitable extinguishing media</b>	: Gigapack III packaging extract	Use an extinguishing agent suitable for the surrounding fire.
	Wild-Type Lambda DNA c1857ind 1 Sam7	Use an extinguishing agent suitable for the surrounding fire.
	VCS257 E. coli Strain	Use an extinguishing agent suitable for the surrounding fire.
	ZAP Express vector	Use an extinguishing agent suitable for the surrounding fire.
	R408 Interference-Resistant Helper Phage	Use an extinguishing agent suitable for the surrounding fire.
	ExAssist Interference-Resistant Helper Phage	Use an extinguishing agent suitable for the surrounding fire.
	XL1-Blue MRF' E.coli Strain	Use an extinguishing agent suitable for the surrounding fire.
	XLOLR E. coli Strain	Use an extinguishing agent suitable for the surrounding fire.
	pRho/EcoR I Test Insert	Use an extinguishing agent suitable for the surrounding fire.

<b>Unsuitable extinguishing media</b>	: Gigapack III packaging extract	None known.
	Wild-Type Lambda DNA c1857ind 1 Sam7	None known.
	VCS257 E. coli Strain	None known.
	ZAP Express vector	None known.
	R408 Interference-Resistant Helper Phage	None known.
	ExAssist Interference-Resistant Helper Phage	None known.
	XL1-Blue MRF' E.coli Strain	None known.
	XLOLR E. coli Strain	None known.
	pRho/EcoR I Test Insert	None known.

**5.2 Special hazards arising from the substance or mixture**

<b>Hazards from the substance or mixture</b>	: Gigapack III 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.
	ZAP Express vector	In a fire or if heated, a pressure increase will occur and the container may burst.
	R408 Interference-Resistant Helper Phage	In a fire or if heated, a pressure increase will occur and the container may burst.
	ExAssist Interference-Resistant Helper Phage	In a fire or if heated, a pressure increase will occur and the container may burst.
	XL1-Blue MRF' E.coli	In a fire or if heated, a pressure increase will occur and the

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<b>Hazardous combustion products</b>	Strain	container may burst.
	XLOLR E. coli Strain	In a fire or if heated, a pressure increase will occur and the container may burst.
	pRho/EcoR I Test Insert	In a fire or if heated, a pressure increase will occur and the container may burst.
	: Gigapack III packaging extract	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	Wild-Type Lambda DNA c1857ind 1 Sam7	No specific data.
	VCS257 E. coli Strain	Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds metal oxide/oxides
	ZAP Express vector	No specific data.
	R408 Interference-Resistant Helper Phage	No specific data.
	ExAssist Interference-Resistant Helper Phage	No specific data.
	XL1-Blue MRF' E.coli Strain	Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds metal oxide/oxides
XLOLR E. coli Strain	Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds metal oxide/oxides	
pRho/EcoR I Test Insert	No specific data.	

**5.3 Advice for firefighters**

<b>Special precautions for fire-fighters</b>	: Gigapack III packaging extract	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.
	Wild-Type Lambda DNA c1857ind 1 Sam7	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.
	VCS257 E. coli Strain	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.
	ZAP Express vector	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.
	R408 Interference-Resistant Helper Phage	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.
	ExAssist Interference-Resistant Helper Phage	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.
	XL1-Blue MRF' E.coli Strain	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.
	XLOLR E. coli Strain	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.
	pRho/EcoR 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.

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**SECTION 5: Firefighting measures**

**Special protective equipment for fire-fighters**

: Gigapack III 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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
ZAP Express vector	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
R408 Interference-Resistant Helper Phage	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
ExAssist Interference-Resistant Helper Phage	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
XL1-Blue MRF' 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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
XLOLR 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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
pRho/EcoR 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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

<b>For non-emergency personnel</b>	:	Gigapack III 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.
		ZAP Express vector	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.
		R408 Interference-Resistant Helper Phage	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.
		ExAssist Interference-Resistant Helper Phage	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 MRF' 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.
		XL0LR 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.
		pRheo/EcoR 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 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".
		ZAP Express vector	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".

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R408 Interference-Resistant Helper Phage	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".
ExAssist Interference-Resistant Helper Phage	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 MRF' 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".
XL0LR 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".
pRho/EcoR 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".

### 6.2 Environmental precautions

: Gigapack III 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).
ZAP Express vector	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).
R408 Interference-Resistant Helper Phage	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).
ExAssist Interference-Resistant Helper Phage	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 MRF' 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).
XL0LR 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).
pRho/EcoR 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).

### 6.3 Methods and material for containment and cleaning up

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**SECTION 6: Accidental release measures**

<b>Methods for cleaning up</b>	: Gigapack III packaging extract	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.
	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.
	ZAP Express vector	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.
	R408 Interference-Resistant Helper Phage	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.
	ExAssist Interference-Resistant Helper Phage	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 MRF' 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.
	XL0LR 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.
	pRho/EcoR 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.

**6.4 Reference to other sections** : See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

**SECTION 7: Handling and storage**

**7.1 Precautions for safe handling**

<b>Protective measures</b>	: Gigapack III packaging extract	Put on appropriate personal protective equipment (see Section 8).
	Wild-Type Lambda DNA c1857ind 1 Sam7	Put on appropriate personal protective equipment (see Section 8).
	VCS257 E. coli Strain	Put on appropriate personal protective equipment (see Section 8).
	ZAP Express vector	Put on appropriate personal protective equipment (see Section 8).
	R408 Interference-	Put on appropriate personal protective equipment (see

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**Advice on general occupational hygiene**

Resistant Helper Phage	Section 8).
ExAssist Interference-Resistant Helper Phage	Put on appropriate personal protective equipment (see Section 8).
XL1-Blue MRF' E.coli Strain	Put on appropriate personal protective equipment (see Section 8).
XLOLR E. coli Strain	Put on appropriate personal protective equipment (see Section 8).
pRho/EcoR I Test Insert	Put on appropriate personal protective equipment (see Section 8).
: Gigapack III packaging extract	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.
Wild-Type Lambda DNA c1857ind 1 Sam7	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.
VCS257 E. coli Strain	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.
ZAP Express vector	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.
R408 Interference-Resistant Helper Phage	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.
ExAssist Interference-Resistant Helper Phage	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.
XL1-Blue MRF' E.coli Strain	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.
XLOLR E. coli Strain	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.
pRho/EcoR I Test Insert	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,

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## SECTION 7: Handling and storage

drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Storage

: Gigapack III packaging extract	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.
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. See Section 10 for incompatible materials before handling or use.
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. See Section 10 for incompatible materials before handling or use.
ZAP Express vector	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.
R408 Interference-Resistant Helper Phage	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.
ExAssist Interference-Resistant Helper Phage	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

## SECTION 7: Handling and storage

XL1-Blue MRF' E.coli Strain	appropriate containment to avoid environmental contamination. See Section 10 for 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.
XLOLR 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. See Section 10 for incompatible materials before handling or use.
pRheo/EcoR I Test Insert	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

### 7.3 Specific end use(s)

#### Recommendations

: Gigapack III packaging extract	Industrial applications, Professional applications.
Wild-Type Lambda DNA c1857ind 1 Sam7	Industrial applications, Professional applications.
VCS257 E. coli Strain	Industrial applications, Professional applications.
ZAP Express vector	Industrial applications, Professional applications.
R408 Interference-Resistant Helper Phage	Industrial applications, Professional applications.
ExAssist Interference-Resistant Helper Phage	Industrial applications, Professional applications.
XL1-Blue MRF' E.coli Strain	Industrial applications, Professional applications.
XLOLR E. coli Strain	Industrial applications, Professional applications.
pRheo/EcoR I Test Insert	Industrial applications, Professional applications.

#### Industrial sector specific solutions

: Gigapack III packaging extract	Not available.
Wild-Type Lambda DNA c1857ind 1 Sam7	Not available.
VCS257 E. coli Strain	Not available.
ZAP Express vector	Not available.
R408 Interference-Resistant Helper Phage	Not available.
ExAssist Interference-Resistant Helper Phage	Not available.
XL1-Blue MRF' E.coli	Not available.

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Strain  
 XLOLR E. coli Strain Not available.  
 pRho/EcoR I Test Insert Not available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

Product/ingredient name	Exposure limit values
<b>Gigapack III packaging extract</b> Sucrose	<b>EH40/2005 WELs (United Kingdom (UK), 8/2018).</b> STEL: 20 mg/m <sup>3</sup> 15 minutes. TWA: 10 mg/m <sup>3</sup> 8 hours.
<b>VCS257 E. coli Strain</b> Glycerol	<b>EH40/2005 WELs (United Kingdom (UK), 8/2018).</b> TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Mist
<b>XL1-Blue MRF' E.coli Strain</b> Glycerol	<b>EH40/2005 WELs (United Kingdom (UK), 8/2018).</b> TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Mist
<b>XLOLR E. coli Strain</b> Glycerol	<b>EH40/2005 WELs (United Kingdom (UK), 8/2018).</b> TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Mist

#### Recommended monitoring procedures

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

#### DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
<b>VCS257 E. coli Strain</b> Sodium chloride	DNEL	Short term Oral	126.65 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	126.65 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	126.65 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	126.65 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	295.52 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	295.52 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	443.28 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Inhalation	443.28 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Short term Inhalation	2068.62 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Inhalation	2068.62 mg/m <sup>3</sup>	Workers	Systemic

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## SECTION 8: Exposure controls/personal protection

		Inhalation	mg/m <sup>3</sup>		
<b>XL1-Blue MRF' E.coli Strain</b> Sodium chloride	DNEL	Short term Oral	126.65 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	126.65 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	126.65 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	126.65 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	295.52 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	295.52 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	443.28 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Inhalation	443.28 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Short term Inhalation	2068.62 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Inhalation	2068.62 mg/m <sup>3</sup>	Workers	Systemic
<b>XLOLR E. coli Strain</b> Sodium chloride	DNEL	Short term Oral	126.65 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	126.65 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	126.65 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	126.65 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	295.52 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	295.52 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	443.28 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Inhalation	443.28 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Short term Inhalation	2068.62 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Inhalation	2068.62 mg/m <sup>3</sup>	Workers	Systemic

### PNECs

No PNECs available

### 8.2 Exposure controls

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

### Individual protection measures

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

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## SECTION 8: Exposure controls/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: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

<b>Physical state</b>	:	Gigapack III packaging extract	Liquid.
		Wild-Type Lambda DNA c1857ind 1 Sam7	Liquid.
		VCS257 E. coli Strain	Liquid.
		ZAP Express vector	Liquid.
		R408 Interference-Resistant Helper Phage	Liquid.
		ExAssist Interference-Resistant Helper Phage	Liquid.
		XL1-Blue MRF' E.coli Strain	Liquid.
		XLOLR E. coli Strain	Liquid.
		pRho/EcoR I Test Insert	Liquid.
<b>Colour</b>	:	Gigapack III packaging extract	Not available.
		Wild-Type Lambda DNA c1857ind 1 Sam7	Not available.
		VCS257 E. coli Strain	Not available.
		ZAP Express vector	Not available.
		R408 Interference-Resistant Helper Phage	Not available.
		ExAssist Interference-Resistant Helper Phage	Not available.
		XL1-Blue MRF' E.coli Strain	Not available.
		XLOLR E. coli Strain	Not available.
		pRho/EcoR I Test Insert	Not available.

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## SECTION 9: Physical and chemical properties

<b>Odour</b>	:	Gigapack III packaging extract	Not available.
		Wild-Type Lambda DNA c1857ind 1 Sam7	Not available.
		VCS257 E. coli Strain	Not available.
		ZAP Express vector	Not available.
		R408 Interference-Resistant Helper Phage	Not available.
		ExAssist Interference-Resistant Helper Phage	Not available.
		XL1-Blue MRF' E.coli Strain	Not available.
		XLOLR E. coli Strain	Not available.
		pRheo/EcoR I Test Insert	Not available.
<b>Odour threshold</b>	:	Gigapack III packaging extract	Not available.
		Wild-Type Lambda DNA c1857ind 1 Sam7	Not available.
		VCS257 E. coli Strain	Not available.
		ZAP Express vector	Not available.
		R408 Interference-Resistant Helper Phage	Not available.
		ExAssist Interference-Resistant Helper Phage	Not available.
		XL1-Blue MRF' E.coli Strain	Not available.
		XLOLR E. coli Strain	Not available.
		pRheo/EcoR I Test Insert	Not available.
<b>pH</b>	:	Gigapack III packaging extract	8
		Wild-Type Lambda DNA c1857ind 1 Sam7	7
		VCS257 E. coli Strain	7
		ZAP Express vector	7.5
		R408 Interference-Resistant Helper Phage	7.5
		ExAssist Interference-Resistant Helper Phage	7.5
		XL1-Blue MRF' E.coli Strain	7
		XLOLR E. coli Strain	7
		pRheo/EcoR I Test Insert	7.5
<b>Melting point/freezing point</b>	:	Gigapack III packaging extract	Not available.
		Wild-Type Lambda DNA c1857ind 1 Sam7	0°C
		VCS257 E. coli Strain	Not available.
		ZAP Express vector	0°C
		R408 Interference-Resistant Helper Phage	0°C
		ExAssist Interference-Resistant Helper Phage	0°C
		XL1-Blue MRF' E.coli Strain	Not available.
		XLOLR E. coli Strain	Not available.
		pRheo/EcoR I Test Insert	0°C

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## SECTION 9: Physical and chemical properties

<b>Initial boiling point and boiling range</b>	:	Gigapack III packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain ZAP Express vector R408 Interference-Resistant Helper Phage ExAssist Interference-Resistant Helper Phage XL1-Blue MRF' E.coli Strain XLOLR E. coli Strain pRho/EcoR I Test Insert	Not available. 100°C Not available. 100°C 100°C 100°C Not available. Not available. 100°C
<b>Flash point</b>	:	Gigapack III packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain ZAP Express vector R408 Interference-Resistant Helper Phage ExAssist Interference-Resistant Helper Phage XL1-Blue MRF' E.coli Strain XLOLR E. coli Strain pRho/EcoR I Test Insert	Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available.
<b>Evaporation rate</b>	:	Gigapack III packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain ZAP Express vector R408 Interference-Resistant Helper Phage ExAssist Interference-Resistant Helper Phage XL1-Blue MRF' E.coli Strain XLOLR E. coli Strain pRho/EcoR I Test Insert	Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available.
<b>Flammability (solid, gas)</b>	:	Gigapack III packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain ZAP Express vector R408 Interference-Resistant Helper Phage ExAssist Interference-Resistant Helper Phage XL1-Blue MRF' E.coli Strain XLOLR E. coli Strain pRho/EcoR I Test Insert	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.

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## SECTION 9: Physical and chemical properties

<b>Upper/lower flammability or explosive limits</b>	: Gigapack III packaging extract	Not available.
	Wild-Type Lambda DNA c1857ind 1 Sam7	Not available.
	VCS257 E. coli Strain	Not available.
	ZAP Express vector	Not available.
	R408 Interference-Resistant Helper Phage	Not available.
	ExAssist Interference-Resistant Helper Phage	Not available.
	XL1-Blue MRF' E.coli Strain	Not available.
	XLOLR E. coli Strain	Not available.
	pRho/EcoR I Test Insert	Not available.
<b>Vapour pressure</b>	: Gigapack III packaging extract	Not available.
	Wild-Type Lambda DNA c1857ind 1 Sam7	Not available.
	VCS257 E. coli Strain	Not available.
	ZAP Express vector	Not available.
	R408 Interference-Resistant Helper Phage	Not available.
	ExAssist Interference-Resistant Helper Phage	Not available.
	XL1-Blue MRF' E.coli Strain	Not available.
	XLOLR E. coli Strain	Not available.
	pRho/EcoR I Test Insert	Not available.
<b>Vapour density</b>	: Gigapack III packaging extract	Not available.
	Wild-Type Lambda DNA c1857ind 1 Sam7	Not available.
	VCS257 E. coli Strain	Not available.
	ZAP Express vector	Not available.
	R408 Interference-Resistant Helper Phage	Not available.
	ExAssist Interference-Resistant Helper Phage	Not available.
	XL1-Blue MRF' E.coli Strain	Not available.
	XLOLR E. coli Strain	Not available.
	pRho/EcoR I Test Insert	Not available.
<b>Relative density</b>	: Gigapack III packaging extract	Not available.
	Wild-Type Lambda DNA c1857ind 1 Sam7	Not available.
	VCS257 E. coli Strain	Not available.
	ZAP Express vector	Not available.
	R408 Interference-Resistant Helper Phage	Not available.
	ExAssist Interference-Resistant Helper Phage	Not available.
	XL1-Blue MRF' E.coli Strain	Not available.
	XLOLR E. coli Strain	Not available.
	pRho/EcoR I Test Insert	Not available.

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**SECTION 9: Physical and chemical properties**

<b>Solubility(ies)</b>	: Gigapack III packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain  ZAP Express vector  R408 Interference-Resistant Helper Phage ExAssist Interference-Resistant Helper Phage XL1-Blue MRF' E.coli Strain XLOLR E. coli Strain  pRho/EcoR 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. 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 packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain ZAP Express vector R408 Interference-Resistant Helper Phage ExAssist Interference-Resistant Helper Phage XL1-Blue MRF' E.coli Strain XLOLR E. coli Strain pRho/EcoR I Test Insert	Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available.
<b>Auto-ignition temperature</b>	: Gigapack III packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain ZAP Express vector R408 Interference-Resistant Helper Phage ExAssist Interference-Resistant Helper Phage XL1-Blue MRF' E.coli Strain XLOLR E. coli Strain pRho/EcoR I Test Insert	Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available.
<b>Decomposition temperature</b>	: Gigapack III packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain ZAP Express vector R408 Interference-Resistant Helper Phage ExAssist Interference-Resistant Helper Phage XL1-Blue MRF' E.coli Strain XLOLR E. coli Strain pRho/EcoR I Test	Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available.

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## SECTION 9: Physical and chemical properties

	Insert	
<b>Viscosity</b>	: Gigapack III packaging extract	Not available.
	Wild-Type Lambda DNA c1857ind 1 Sam7	Not available.
	VCS257 E. coli Strain	Not available.
	ZAP Express vector	Not available.
	R408 Interference-Resistant Helper Phage	Not available.
	ExAssist Interference-Resistant Helper Phage	Not available.
	XL1-Blue MRF' E.coli Strain	Not available.
	XLOLR E. coli Strain	Not available.
	pRho/EcoR I Test	Not available.
	Insert	
<b>Explosive properties</b>	: Gigapack III packaging extract	Not available.
	Wild-Type Lambda DNA c1857ind 1 Sam7	Not available.
	VCS257 E. coli Strain	Not available.
	ZAP Express vector	Not available.
	R408 Interference-Resistant Helper Phage	Not available.
	ExAssist Interference-Resistant Helper Phage	Not available.
	XL1-Blue MRF' E.coli Strain	Not available.
	XLOLR E. coli Strain	Not available.
	pRho/EcoR I Test	Not available.
	Insert	
<b>Oxidising properties</b>	: Gigapack III packaging extract	Not available.
	Wild-Type Lambda DNA c1857ind 1 Sam7	Not available.
	VCS257 E. coli Strain	Not available.
	ZAP Express vector	Not available.
	R408 Interference-Resistant Helper Phage	Not available.
	ExAssist Interference-Resistant Helper Phage	Not available.
	XL1-Blue MRF' E.coli Strain	Not available.
	XLOLR E. coli Strain	Not available.
	pRho/EcoR I Test	Not available.
	Insert	

### 9.2 Other information

No additional information.

## SECTION 10: Stability and reactivity

<b>10.1 Reactivity</b>	: Gigapack III packaging extract	No specific test data related to reactivity available for this product or its ingredients.
	Wild-Type Lambda DNA c1857ind 1 Sam7	No specific test data related to reactivity available for this product or its ingredients.
	VCS257 E. coli Strain	No specific test data related to reactivity available for this product or its ingredients.
	ZAP Express vector	No specific test data related to reactivity available for this product or its ingredients.
	R408 Interference-Resistant Helper Phage	No specific test data related to reactivity available for this product or its ingredients.

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**SECTION 10: Stability and reactivity**

ExAssist Interference-Resistant Helper Phage	No specific test data related to reactivity available for this product or its ingredients.
XL1-Blue MRF' E.coli Strain	No specific test data related to reactivity available for this product or its ingredients.
XLOLR E. coli Strain	No specific test data related to reactivity available for this product or its ingredients.
pRho/EcoR I Test Insert	No specific test data related to reactivity available for this product or its ingredients.

**10.2 Chemical stability**

: Gigapack III packaging extract	The product is stable.
Wild-Type Lambda DNA c1857ind 1 Sam7	The product is stable.
VCS257 E. coli Strain	The product is stable.
ZAP Express vector	The product is stable.
R408 Interference-Resistant Helper Phage	The product is stable.
ExAssist Interference-Resistant Helper Phage	The product is stable.
XL1-Blue MRF' E.coli Strain	The product is stable.
XLOLR E. coli Strain	The product is stable.
pRho/EcoR I Test Insert	The product is stable.

**10.3 Possibility of hazardous reactions**

: Gigapack III packaging extract	Under normal conditions of storage and use, hazardous reactions will not occur.
Wild-Type Lambda DNA c1857ind 1 Sam7	Under normal conditions of storage and use, hazardous reactions will not occur.
VCS257 E. coli Strain	Under normal conditions of storage and use, hazardous reactions will not occur.
ZAP Express vector	Under normal conditions of storage and use, hazardous reactions will not occur.
R408 Interference-Resistant Helper Phage	Under normal conditions of storage and use, hazardous reactions will not occur.
ExAssist Interference-Resistant Helper Phage	Under normal conditions of storage and use, hazardous reactions will not occur.
XL1-Blue MRF' E.coli Strain	Under normal conditions of storage and use, hazardous reactions will not occur.
XLOLR E. coli Strain	Under normal conditions of storage and use, hazardous reactions will not occur.
pRho/EcoR I Test Insert	Under normal conditions of storage and use, hazardous reactions will not occur.

**10.4 Conditions to avoid**

: Gigapack III packaging extract	No specific data.
Wild-Type Lambda DNA c1857ind 1 Sam7	No specific data.
VCS257 E. coli Strain	No specific data.
ZAP Express vector	No specific data.
R408 Interference-Resistant Helper Phage	No specific data.
ExAssist Interference-Resistant Helper Phage	No specific data.
XL1-Blue MRF' E.coli Strain	No specific data.
XLOLR E. coli Strain	No specific data.
pRho/EcoR I Test Insert	No specific data.

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**SECTION 10: Stability and reactivity**

**10.5 Incompatible materials**

- : Gigapack III packaging extract May react or be incompatible with oxidising materials.
- Wild-Type Lambda DNA c1857ind 1 Sam7 May react or be incompatible with oxidising materials.
- VCS257 E. coli Strain May react or be incompatible with oxidising materials.
- ZAP Express vector May react or be incompatible with oxidising materials.
- R408 Interference-Resistant Helper Phage May react or be incompatible with oxidising materials.
- ExAssist Interference-Resistant Helper Phage May react or be incompatible with oxidising materials.
- XL1-Blue MRF' E.coli Strain May react or be incompatible with oxidising materials.
- XLOLR E. coli Strain May react or be incompatible with oxidising materials.
- pRho/EcoR I Test Insert May react or be incompatible with oxidising materials.

**10.6 Hazardous decomposition products**

- : Gigapack III packaging extract 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.
- ZAP Express vector Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- R408 Interference-Resistant Helper Phage Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- ExAssist Interference-Resistant Helper Phage Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- XL1-Blue MRF' E.coli Strain Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- XLOLR E. coli Strain Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- pRho/EcoR I Test Insert Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**SECTION 11: Toxicological information**

**11.1 Information on toxicological effects**

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
<b>VCS257 E. coli Strain</b> Sodium chloride	LD50 Oral	Rat	3000 mg/kg	-
<b>XL1-Blue MRF' E.coli Strain</b> Sodium chloride	LD50 Oral	Rat	3000 mg/kg	-
<b>XLOLR E. coli Strain</b> Sodium chloride	LD50 Oral	Rat	3000 mg/kg	-

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)

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## SECTION 11: Toxicological information

<b>VCS257 E. coli Strain</b> Sodium chloride	3000	N/A	N/A	N/A	N/A
<b>XL1-Blue MRF' E.coli Strain</b> Sodium chloride	3000	N/A	N/A	N/A	N/A
<b>XLOLR E. coli Strain</b> Sodium chloride	3000	N/A	N/A	N/A	N/A

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
<b>VCS257 E. coli Strain</b> Sodium chloride	Eyes - Moderate irritant	Rabbit	-	24 hours 100 mg	-
	Eyes - Moderate irritant	Rabbit	-	10 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
<b>XL1-Blue MRF' E.coli Strain</b> Sodium chloride	Eyes - Moderate irritant	Rabbit	-	24 hours 100 mg	-
	Eyes - Moderate irritant	Rabbit	-	10 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
<b>XLOLR E. coli Strain</b> Sodium chloride	Eyes - Moderate irritant	Rabbit	-	24 hours 100 mg	-
	Eyes - Moderate irritant	Rabbit	-	10 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-

### Sensitiser

**Conclusion/Summary** : Not available.

### Mutagenicity

**Conclusion/Summary** : Not available.

### Carcinogenicity

**Conclusion/Summary** : Not available.

### Reproductive toxicity

**Conclusion/Summary** : Not available.

### Teratogenicity

**Conclusion/Summary** : Not available.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

### Information on likely routes of exposure

: Gigapack III packaging extract Not available.  
 Wild-Type Lambda DNA c1857ind 1 Sam7 Not available.  
 VCS257 E. coli Strain Routes of entry anticipated: Oral, Dermal, Inhalation.  
 ZAP Express vector Not available.  
 R408 Interference-Resistant Helper Phage Not available.

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## SECTION 11: Toxicological information

ExAssist Interference-Resistant Helper Phage	Not available.
XL1-Blue MRF' E.coli Strain	Routes of entry anticipated: Oral, Dermal, Inhalation.
XLOLR E. coli Strain	Routes of entry anticipated: Oral, Dermal, Inhalation.
pRho/EcoR I Test Insert	Not available.

### Potential acute health effects

<b>Inhalation</b>	:	Gigapack III 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.
		ZAP Express vector	No known significant effects or critical hazards.
		R408 Interference-Resistant Helper Phage	No known significant effects or critical hazards.
		ExAssist Interference-Resistant Helper Phage	No known significant effects or critical hazards.
		XL1-Blue MRF' E.coli Strain	No known significant effects or critical hazards.
		XLOLR E. coli Strain	No known significant effects or critical hazards.
		pRho/EcoR I Test Insert	No known significant effects or critical hazards.
<b>Ingestion</b>	:	Gigapack III 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.
		ZAP Express vector	No known significant effects or critical hazards.
		R408 Interference-Resistant Helper Phage	No known significant effects or critical hazards.
		ExAssist Interference-Resistant Helper Phage	No known significant effects or critical hazards.
		XL1-Blue MRF' E.coli Strain	No known significant effects or critical hazards.
		XLOLR E. coli Strain	No known significant effects or critical hazards.
		pRho/EcoR I Test Insert	No known significant effects or critical hazards.
<b>Skin contact</b>	:	Gigapack III 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.
		ZAP Express vector	No known significant effects or critical hazards.
		R408 Interference-Resistant Helper Phage	No known significant effects or critical hazards.
		ExAssist Interference-Resistant Helper Phage	No known significant effects or critical hazards.
		XL1-Blue MRF' E.coli Strain	No known significant effects or critical hazards.
		XLOLR E. coli Strain	No known significant effects or critical hazards.
		pRho/EcoR I Test Insert	No known significant effects or critical hazards.
<b>Eye contact</b>	:	Gigapack III 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.
		ZAP Express vector	No known significant effects or critical hazards.
		R408 Interference-Resistant Helper Phage	No known significant effects or critical hazards.
		ExAssist Interference-Resistant Helper Phage	No known significant effects or critical hazards.
		XL1-Blue MRF' E.coli Strain	No known significant effects or critical hazards.
		XLOLR E. coli Strain	No known significant effects or critical hazards.

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## SECTION 11: Toxicological information

pRho/EcoR I Test Insert No known significant effects or critical hazards.

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

<b>Inhalation</b>	:	Gigapack III packaging extract	No specific data.
		Wild-Type Lambda DNA c1857ind 1 Sam7	No specific data.
		VCS257 E. coli Strain	No specific data.
		ZAP Express vector	No specific data.
		R408 Interference-Resistant Helper Phage	No specific data.
		ExAssist Interference-Resistant Helper Phage	No specific data.
		XL1-Blue MRF' E.coli Strain	No specific data.
		XLOLR E. coli Strain	No specific data.
		pRho/EcoR I Test Insert	No specific data.
<b>Ingestion</b>	:	Gigapack III packaging extract	No specific data.
		Wild-Type Lambda DNA c1857ind 1 Sam7	No specific data.
		VCS257 E. coli Strain	No specific data.
		ZAP Express vector	No specific data.
		R408 Interference-Resistant Helper Phage	No specific data.
		ExAssist Interference-Resistant Helper Phage	No specific data.
		XL1-Blue MRF' E.coli Strain	No specific data.
		XLOLR E. coli Strain	No specific data.
		pRho/EcoR I Test Insert	No specific data.
<b>Skin contact</b>	:	Gigapack III packaging extract	No specific data.
		Wild-Type Lambda DNA c1857ind 1 Sam7	No specific data.
		VCS257 E. coli Strain	No specific data.
		ZAP Express vector	No specific data.
		R408 Interference-Resistant Helper Phage	No specific data.
		ExAssist Interference-Resistant Helper Phage	No specific data.
		XL1-Blue MRF' E.coli Strain	No specific data.
		XLOLR E. coli Strain	No specific data.
		pRho/EcoR I Test Insert	No specific data.
<b>Eye contact</b>	:	Gigapack III packaging extract	No specific data.
		Wild-Type Lambda DNA c1857ind 1 Sam7	No specific data.
		VCS257 E. coli Strain	No specific data.
		ZAP Express vector	No specific data.
		R408 Interference-Resistant Helper Phage	No specific data.
		ExAssist Interference-Resistant Helper Phage	No specific data.
		XL1-Blue MRF' E.coli Strain	No specific data.
		XLOLR E. coli Strain	No specific data.
		pRho/EcoR I Test Insert	No specific data.

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

#### Short term exposure

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## SECTION 11: Toxicological information

**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>	: Gigapack III packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain ZAP Express vector R408 Interference-Resistant Helper Phage ExAssist Interference-Resistant Helper Phage XL1-Blue MRF' E.coli Strain XL0LR E. coli Strain pRheo/EcoR 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. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: Gigapack III packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain ZAP Express vector R408 Interference-Resistant Helper Phage ExAssist Interference-Resistant Helper Phage XL1-Blue MRF' E.coli Strain XL0LR E. coli Strain pRheo/EcoR 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. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Mutagenicity</b>	: Gigapack III packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain ZAP Express vector R408 Interference-Resistant Helper Phage ExAssist Interference-Resistant Helper Phage XL1-Blue MRF' E.coli Strain XL0LR E. coli Strain pRheo/EcoR 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. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Reproductive toxicity</b>	: Gigapack III packaging extract Wild-Type Lambda DNA c1857ind 1 Sam7 VCS257 E. coli Strain ZAP Express vector R408 Interference-Resistant Helper Phage	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.

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## SECTION 11: Toxicological information

ExAssist Interference-Resistant Helper Phage	No known significant effects or critical hazards.
XL1-Blue MRF' E.coli Strain	No known significant effects or critical hazards.
XL0LR E. coli Strain	No known significant effects or critical hazards.
pRheo/EcoR I Test Insert	No known significant effects or critical hazards.

## SECTION 12: Ecological information

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
<b>VCS257 E. coli Strain</b> Sodium chloride	Acute EC50 4.74 g/L Fresh water	Algae - Chlamydomonas reinhardtii	96 hours
	Acute EC50 519.6 mg/l Fresh water	Crustaceans - Cypris subglobosa	48 hours
	Acute IC50 6.87 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
	Acute LC50 1000000 µg/l Fresh water	Fish - Morone saxatilis - Larvae	96 hours
	Chronic LC10 781 mg/l Fresh water	Crustaceans - Hyalella azteca - Juvenile (Fledgling, Hatchling, Weanling)	3 weeks
<b>XL1-Blue MRF' E.coli Strain</b> Sodium chloride	Chronic NOEC 6 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
	Chronic NOEC 0.314 g/L Fresh water	Daphnia - Daphnia pulex	21 days
	Chronic NOEC 100 mg/l Fresh water	Fish - Gambusia holbrooki - Adult	8 weeks
	Acute EC50 4.74 g/L Fresh water	Algae - Chlamydomonas reinhardtii	96 hours
	Acute EC50 519.6 mg/l Fresh water	Crustaceans - Cypris subglobosa	48 hours
<b>XL0LR E. coli Strain</b> Sodium chloride	Acute IC50 6.87 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
	Acute LC50 1000000 µg/l Fresh water	Fish - Morone saxatilis - Larvae	96 hours
	Chronic LC10 781 mg/l Fresh water	Crustaceans - Hyalella azteca - Juvenile (Fledgling, Hatchling, Weanling)	3 weeks
	Chronic NOEC 6 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
	Chronic NOEC 0.314 g/L Fresh water	Daphnia - Daphnia pulex	21 days
<b>XL0LR E. coli Strain</b> Sodium chloride	Chronic NOEC 100 mg/l Fresh water	Fish - Gambusia holbrooki - Adult	8 weeks
	Acute EC50 4.74 g/L Fresh water	Algae - Chlamydomonas reinhardtii	96 hours
	Acute EC50 519.6 mg/l Fresh water	Crustaceans - Cypris subglobosa	48 hours
	Acute IC50 6.87 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
	Acute LC50 1000000 µg/l Fresh water	Fish - Morone saxatilis - Larvae	96 hours
<b>XL0LR E. coli Strain</b> Sodium chloride	Chronic LC10 781 mg/l Fresh water	Crustaceans - Hyalella azteca - Juvenile (Fledgling, Hatchling, Weanling)	3 weeks
	Chronic NOEC 6 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
	Chronic NOEC 0.314 g/L Fresh water	Daphnia - Daphnia pulex	21 days
	Chronic NOEC 100 mg/l Fresh water	Fish - Gambusia holbrooki - Adult	8 weeks
	Acute EC50 4.74 g/L Fresh water	Algae - Chlamydomonas reinhardtii	96 hours
<b>XL0LR E. coli Strain</b> Sodium chloride	Acute EC50 519.6 mg/l Fresh water	Crustaceans - Cypris subglobosa	48 hours
	Acute IC50 6.87 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
	Acute LC50 1000000 µg/l Fresh water	Fish - Morone saxatilis - Larvae	96 hours
	Chronic LC10 781 mg/l Fresh water	Crustaceans - Hyalella azteca - Juvenile (Fledgling, Hatchling, Weanling)	3 weeks
	Chronic NOEC 6 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
<b>XL0LR E. coli Strain</b> Sodium chloride	Chronic NOEC 0.314 g/L Fresh water	Daphnia - Daphnia pulex	21 days
	Chronic NOEC 100 mg/l Fresh water	Fish - Gambusia holbrooki - Adult	8 weeks
	Acute EC50 4.74 g/L Fresh water	Algae - Chlamydomonas reinhardtii	96 hours
	Acute EC50 519.6 mg/l Fresh water	Crustaceans - Cypris subglobosa	48 hours
	Acute IC50 6.87 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
<b>XL0LR E. coli Strain</b> Sodium chloride	Acute LC50 1000000 µg/l Fresh water	Fish - Morone saxatilis - Larvae	96 hours
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	Chronic NOEC 6 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
	Chronic NOEC 0.314 g/L Fresh water	Daphnia - Daphnia pulex	21 days
	Chronic NOEC 100 mg/l Fresh water	Fish - Gambusia holbrooki - Adult	8 weeks

### 12.2 Persistence and degradability

Not available.

### 12.3 Bioaccumulative potential

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## SECTION 12: Ecological information

Not available.

### 12.4 Mobility in soil

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

**Mobility** : Not available.

### 12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

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

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

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

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

#### Packaging

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**Special precautions** : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: Transport information

	<b>ADR/RID</b>	<b>IMDG</b>	<b>IATA</b>
<b>14.1 UN number</b>	Not regulated.	Not regulated.	Not regulated.
<b>14.2 UN proper shipping name</b>	-	-	-
<b>14.3 Transport hazard class(es)</b>	-	-	-
<b>14.4 Packing group</b>	-	-	-
<b>14.5 Environmental hazards</b>	No.	No.	No.

### Additional information

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

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## SECTION 14: Transport information

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

## SECTION 15: Regulatory information

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

[EU Regulation \(EC\) No. 1907/2006 \(REACH\)](#)

[Annex XIV - List of substances subject to authorisation](#)

[Annex XIV](#)

None of the components are listed.

[Substances of very high concern](#)

None of the components are listed.

[Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles](#)

Label	: Gigapack III packaging extract	Not applicable.
	Wild-Type Lambda DNA c1857ind 1 Sam7	Not applicable.
	VCS257 E. coli Strain	Not applicable.
	ZAP Express vector	Not applicable.
	R408 Interference-Resistant Helper Phage	Not applicable.
	ExAssist Interference-Resistant Helper Phage	Not applicable.
	XL1-Blue MRF <sup>+</sup> E.coli Strain	Not applicable.
	XL0LR E. coli Strain	Not applicable.
	pRheo/EcoR I Test Insert	Not applicable.

[Other EU regulations](#)

[Ozone depleting substances \(1005/2009/EU\)](#)

Not listed.

[Prior Informed Consent \(PIC\) \(649/2012/EU\)](#)

Not listed.

[Seveso Directive](#)

This product is not controlled under the Seveso Directive.

[International regulations](#)

[Chemical Weapon Convention List Schedules I, II & III Chemicals](#)

Not listed.

[Montreal Protocol](#)

Not listed.

[Stockholm Convention on Persistent Organic Pollutants](#)

Not listed.

[Rotterdam Convention on Prior Informed Consent \(PIC\)](#)

Not listed.

[UNECE Aarhus Protocol on POPs and Heavy Metals](#)

Not listed.

[Inventory list](#)

[Australia](#) : Not determined.

[Canada](#) : Not determined.

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## SECTION 15: Regulatory information

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

**15.2 Chemical safety assessment** : This product contains substances for which Chemical Safety Assessments might still be required.

## SECTION 16: Other information

Indicates information that has changed from previously issued version.

<b>Abbreviations and acronyms</b>	: ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement N/A = Not available PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number vPvB = Very Persistent and Very Bioaccumulative
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### Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Not classified.	

### Full text of abbreviated H statements

<b>VCS257 E. coli Strain</b> H319	Causes serious eye irritation.
<b>XL1-Blue MRF' E.coli Strain</b> H319	Causes serious eye irritation.
<b>XLOLR E. coli Strain</b> H319	Causes serious eye irritation.

### Full text of classifications [CLP/GHS]

<input checked="" type="checkbox"/> <b>VCS257 E. coli Strain</b> Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
<b>XL1-Blue MRF' E.coli Strain</b> Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
<b>XLOLR E. coli Strain</b> Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2

**Date of issue/ Date of revision** : 10/11/2020

**Date of previous issue** : 27/08/2018

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## **SECTION 16: Other information**

**Version** : 3

### [Notice to reader](#)

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