

# SAFETY DATA SHEET

ZAP-CMV XR Predigested Vector Kit, Part Number 239222

## Section 1. Identification

### 1.1 Product identifier

**Product name** : ZAP-CMV XR Predigested Vector Kit, Part Number 239222  
**Part no. (chemical kit)** : 239222  
**Part no.** : pBR322 Test Insert Digested With EcoR I and Sal I 210200-52  
 XL1-Blue MRF' E.coli Strain 200301-81  
 XLOLR E. coli Strain 200304-81  
 ExAssist Interference-Resistant Helper Phage 200253-81  
 R408 Interference-Resistant Helper Phage 200252-81  
 Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated 239222-51

**Validation date** : 11/4/2020

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

**Material uses** : Analytical reagent.  
 pBR322 Test Insert Digested With EcoR I and Sal I 10 µl (2.5 µg 0.25 µg/µl)  
 XL1-Blue MRF' E.coli Strain 500 µl  
 XLOLR E. coli Strain 500 µl  
 ExAssist Interference-Resistant Helper Phage 1000 µl (>1 x E10 pfu/ml)  
 R408 Interference-Resistant Helper Phage 1000 µl  
 Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated 10 µl (10 µg 1 µg/µl)

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

**Supplier/Manufacturer** : Agilent Technologies, Inc.  
 5301 Stevens Creek Blvd  
 Santa Clara, CA 95051, USA  
 800-227-9770

### 1.4 Emergency telephone number

**In case of emergency** : CHEMTREC®: 1-800-424-9300

## Section 2. Hazards identification

### 2.1 Classification of the substance or mixture

**OSHA/HCS status** : pBR322 Test Insert Digested With EcoR I and Sal I While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.  
 XL1-Blue MRF' E.coli Strain This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).  
 XLOLR E. coli Strain This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).  
 ExAssist Interference-Resistant Helper Phage While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product.

## Section 2. Hazards identification

R408 Interference-Resistant  
Helper Phage

This SDS should be retained and available for employees and other users of this product.

While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Lambda ZAP-CMV XR  
Vector Digested With Xho I  
And EcoR I CIAP Treated

While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

### Classification of the substance or mixture

#### **XL1-Blue MRF' E.coli Strain**

H319 EYE IRRITATION - Category 2A

#### **XLOLR E. coli Strain**

H319 EYE IRRITATION - Category 2A

### 2.2 GHS label elements

#### **Hazard pictograms**

: XL1-Blue MRF' E.coli Strain



XLOLR E. coli Strain



#### **Signal word**

: pBR322 Test Insert Digested With EcoR I and Sal I No signal word.  
 XL1-Blue MRF' E.coli Strain Warning  
 XLOLR E. coli Strain Warning  
 ExAssist Interference-Resistant Helper Phage No signal word.  
 R408 Interference-Resistant Helper Phage No signal word.  
 Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated No signal word.

#### **Hazard statements**

: pBR322 Test Insert Digested With EcoR I and Sal I No known significant effects or critical hazards.  
 XL1-Blue MRF' E.coli Strain H319 - Causes serious eye irritation.  
 XLOLR E. coli Strain H319 - Causes serious eye irritation.  
 ExAssist Interference-Resistant Helper Phage No known significant effects or critical hazards.  
 R408 Interference-Resistant Helper Phage No known significant effects or critical hazards.  
 Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated No known significant effects or critical hazards.

### Precautionary statements

## Section 2. Hazards identification

<b>Prevention</b>	:	pBR322 Test Insert Digested With EcoR I and Sal I	Not applicable.
		XL1-Blue MRF' E.coli Strain	P280 - Wear eye or face protection.
		XLOLR E. coli Strain	P280 - Wear eye or face protection.
		ExAssist Interference-Resistant Helper Phage	Not applicable.
		R408 Interference-Resistant Helper Phage	Not applicable.
		Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	Not applicable.
<b>Response</b>	:	pBR322 Test Insert Digested With EcoR I and Sal I	Not applicable.
		XL1-Blue MRF' E.coli Strain	P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
			P337 + P313 - If eye irritation persists: Get medical advice or attention.
		XLOLR E. coli Strain	P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
			P337 + P313 - If eye irritation persists: Get medical advice or attention.
		ExAssist Interference-Resistant Helper Phage	Not applicable.
		R408 Interference-Resistant Helper Phage	Not applicable.
<b>Storage</b>	:	pBR322 Test Insert Digested With EcoR I and Sal I	Not applicable.
		XL1-Blue MRF' E.coli Strain	Not applicable.
		XLOLR E. coli Strain	Not applicable.
		ExAssist Interference-Resistant Helper Phage	Not applicable.
		R408 Interference-Resistant Helper Phage	Not applicable.
		Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	Not applicable.
<b>Disposal</b>	:	pBR322 Test Insert Digested With EcoR I and Sal I	Not applicable.
		XL1-Blue MRF' E.coli Strain	Not applicable.
		XLOLR E. coli Strain	Not applicable.
		ExAssist Interference-Resistant Helper Phage	Not applicable.
		R408 Interference-Resistant Helper Phage	Not applicable.
		Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	Not applicable.

## Section 2. Hazards identification

<b>Supplemental label elements</b>	:	pBR322 Test Insert Digested With EcoR I and Sal I	None known.
		XL1-Blue MRF' E.coli Strain	None known.
		XLOLR E. coli Strain	None known.
		ExAssist Interference-Resistant Helper Phage	None known.
		R408 Interference-Resistant Helper Phage	None known.
		Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	None known.

### 2.3 Other hazards

<b>Hazards not otherwise classified</b>	:	pBR322 Test Insert Digested With EcoR I and Sal I	None known.
		XL1-Blue MRF' E.coli Strain	None known.
		XLOLR E. coli Strain	None known.
		ExAssist Interference-Resistant Helper Phage	None known.
		R408 Interference-Resistant Helper Phage	None known.
		Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	None known.

## Section 3. Composition/information on ingredients

<b>Substance/mixture</b>	:	pBR322 Test Insert Digested With EcoR I and Sal I	Mixture
		XL1-Blue MRF' E.coli Strain	Mixture
		XLOLR E. coli Strain	Mixture
		ExAssist Interference-Resistant Helper Phage	Mixture
		R408 Interference-Resistant Helper Phage	Mixture
		Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	Mixture

Ingredient name	%	CAS number
<b>XL1-Blue MRF' E.coli Strain</b>		
Glycerol	≥10 - ≤25	56-81-5
Sodium chloride	≤3	7647-14-5
<b>XLOLR E. coli Strain</b>		
Glycerol	≥10 - ≤25	56-81-5
Sodium chloride	≤3	7647-14-5

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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

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

## Section 4. First aid measures

### 4.1 Description of necessary first aid measures

<b>Eye contact</b>	: pBR322 Test Insert Digested With EcoR I and Sal I	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	XL1-Blue 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. Continue to rinse for at least 10 minutes. Get medical attention.
	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. Continue to rinse for at least 10 minutes. Get medical attention.
	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.
	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.
	Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
<b>Inhalation</b>	: pBR322 Test Insert Digested With EcoR I and Sal I	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. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
	XLOLR E. coli Strain	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
	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.
	R408 Interference-Resistant	Remove victim to fresh air and keep at rest in a

## Section 4. First aid measures

	Helper Phage	position comfortable for breathing. Get medical attention if symptoms occur.
	Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	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>	: pBR322 Test Insert Digested With EcoR I and Sal I	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. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	XL0LR E. coli Strain	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	ExAssist Interference-Resistant Helper Phage	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.
	Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
<b>Ingestion</b>	: pBR322 Test Insert Digested With EcoR I and Sal I	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	XL1-Blue MRF' E.coli Strain	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
	XL0LR E. coli Strain	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting

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	occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
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.
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.
Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	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.

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

#### Potential acute health effects

<b>Eye contact</b>	: pBR322 Test Insert Digested With EcoR I and Sal I	No known significant effects or critical hazards.
	XL1-Blue MRF' E.coli Strain	Causes serious eye irritation.
	XL0LR E. coli Strain	Causes serious eye irritation.
	ExAssist Interference-Resistant Helper Phage	No known significant effects or critical hazards.
	R408 Interference-Resistant Helper Phage	No known significant effects or critical hazards.
	Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	No known significant effects or critical hazards.
<b>Inhalation</b>	: pBR322 Test Insert Digested With EcoR I and Sal I	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.
	ExAssist Interference-Resistant Helper Phage	No known significant effects or critical hazards.
	R408 Interference-Resistant Helper Phage	No known significant effects or critical hazards.
	Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	No known significant effects or critical hazards.

## Section 4. First aid measures

<b>Skin contact</b>	: pBR322 Test Insert Digested With EcoR I and Sal I	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.
	ExAssist Interference-Resistant Helper Phage	No known significant effects or critical hazards.
	R408 Interference-Resistant Helper Phage	No known significant effects or critical hazards.
	Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	No known significant effects or critical hazards.
<b>Ingestion</b>	: pBR322 Test Insert Digested With EcoR I and Sal I	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.
	ExAssist Interference-Resistant Helper Phage	No known significant effects or critical hazards.
	R408 Interference-Resistant Helper Phage	No known significant effects or critical hazards.
	Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	No known significant effects or critical hazards.
<b><u>Over-exposure signs/symptoms</u></b>		
<b>Eye contact</b>	: pBR322 Test Insert Digested With EcoR I and Sal I	No specific data.
	XL1-Blue MRF' E.coli Strain	Adverse symptoms may include the following: pain or irritation watering redness
	XL0LR E. coli Strain	Adverse symptoms may include the following: pain or irritation watering redness
	ExAssist Interference-Resistant Helper Phage	No specific data.
	R408 Interference-Resistant Helper Phage	No specific data.
	Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	No specific data.
<b>Inhalation</b>	: pBR322 Test Insert Digested With EcoR I and Sal I	No specific data.
	XL1-Blue MRF' E.coli Strain	No specific data.
	XL0LR E. coli Strain	No specific data.
	ExAssist Interference-Resistant Helper Phage	No specific data.
	R408 Interference-Resistant Helper Phage	No specific data.
	Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	No specific data.

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<b>Skin contact</b>	: pBR322 Test Insert Digested With EcoR I and Sal I XL1-Blue MRF' E.coli Strain XLOLR E. coli Strain ExAssist Interference-Resistant Helper Phage R408 Interference-Resistant Helper Phage Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	No specific data. No specific data. No specific data. No specific data. No specific data. No specific data.
<b>Ingestion</b>	: pBR322 Test Insert Digested With EcoR I and Sal I XL1-Blue MRF' E.coli Strain XLOLR E. coli Strain ExAssist Interference-Resistant Helper Phage R408 Interference-Resistant Helper Phage Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	No specific data. No specific data. No specific data. No specific data. No specific data. No specific data.

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

<b>Notes to physician</b>	: pBR322 Test Insert Digested With EcoR I and Sal I  XL1-Blue MRF' E.coli Strain  XLOLR E. coli Strain  ExAssist Interference-Resistant Helper Phage  R408 Interference-Resistant Helper Phage  Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	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.
<b>Specific treatments</b>	: pBR322 Test Insert Digested With EcoR I and Sal I XL1-Blue MRF' E.coli Strain XLOLR E. coli Strain ExAssist Interference-Resistant Helper Phage R408 Interference-Resistant Helper Phage Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	No specific treatment. No specific treatment. No specific treatment. No specific treatment. No specific treatment. No specific treatment.

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<b>Protection of first-aiders</b>	: pBR322 Test Insert Digested With EcoR I and Sal I XL1-Blue MRF' E.coli Strain  XLOLR E. coli Strain  ExAssist Interference-Resistant Helper Phage R408 Interference-Resistant Helper Phage Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	No action shall be taken involving any personal risk or without suitable training. No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. No action shall be taken involving any personal risk or without suitable training. No action shall be taken involving any personal risk or without suitable training. No action shall be taken involving any personal risk or without suitable training.
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See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### 5.1 Extinguishing media

<b>Suitable extinguishing media</b>	: pBR322 Test Insert Digested With EcoR I and Sal I XL1-Blue MRF' E.coli Strain  XLOLR E. coli Strain  ExAssist Interference-Resistant Helper Phage R408 Interference-Resistant Helper Phage Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	: pBR322 Test Insert Digested With EcoR I and Sal I XL1-Blue MRF' E.coli Strain XLOLR E. coli Strain ExAssist Interference-Resistant Helper Phage R408 Interference-Resistant Helper Phage Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	None known. None known. None known. None known. None known. None known.

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

<b>Specific hazards arising from the chemical</b>	: pBR322 Test Insert Digested With EcoR I and Sal I XL1-Blue MRF' E.coli Strain  XLOLR E. coli Strain  ExAssist Interference-Resistant Helper Phage	In a fire or if heated, a pressure increase will occur and the container may burst. In a fire or if heated, a pressure increase will occur and the container may burst. In a fire or if heated, a pressure increase will occur and the container may burst. In a fire or if heated, a pressure increase will occur and the container may burst.
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## Section 5. Fire-fighting measures

<b>Hazardous thermal decomposition products</b>	R408 Interference-Resistant Helper Phage	In a fire or if heated, a pressure increase will occur and the container may burst.
	Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	In a fire or if heated, a pressure increase will occur and the container may burst.
	: pBR322 Test Insert Digested With EcoR I and Sal I	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
	XL0LR E. coli Strain	Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds metal oxide/oxides
	ExAssist Interference-Resistant Helper Phage	No specific data.
	R408 Interference-Resistant Helper Phage	No specific data.
	Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	No specific data.

### 5.3 Advice for firefighters

#### Special protective actions for fire-fighters

: pBR322 Test Insert Digested With EcoR I and Sal I	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
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.
XL0LR 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.
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.
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.
Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

## Section 5. Fire-fighting measures

<b>Special protective equipment for fire-fighters</b>	: pBR322 Test Insert Digested With EcoR I and Sal I	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	XL1-Blue 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.
	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.
	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.
	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.
	Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

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

<b>For non-emergency personnel</b>	: pBR322 Test Insert Digested With EcoR I and Sal I	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled 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 spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
	XLOLR 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 spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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 spilled material. Put on appropriate personal protective equipment.
	R408 Interference-Resistant	No action shall be taken involving any personal

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Helper Phage	risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	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 spilled material. Put on appropriate personal protective equipment.
<b>For emergency responders :</b> pBR322 Test Insert Digested With EcoR I and Sal I	If specialized 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 specialized 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 specialized 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 specialized 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".
R408 Interference-Resistant Helper Phage	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
<b>6.2 Environmental precautions</b> : pBR322 Test Insert Digested With EcoR I and Sal I	Avoid dispersal of spilled 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 spilled 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 spilled 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 spilled 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 spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 6. Accidental release measures

Lambda ZAP-CMV XR Vector  
Digested With Xho I And EcoR I  
CIAP Treated

Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).  
Avoid dispersal of spilled 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 materials for containment and cleaning up

<b>Methods for cleaning up</b>	: pBR322 Test Insert Digested With EcoR I and Sal I	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
	XL1-Blue 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.
	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.
	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.
	Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

## Section 7. Handling and storage

### 7.1 Precautions for safe handling

<b>Protective measures</b>	: pBR322 Test Insert Digested With EcoR I and Sal I XL1-Blue MRF' E.coli Strain	Put on appropriate personal protective equipment (see Section 8). Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers
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## Section 7. Handling and storage

		retain product residue and can be hazardous. Do not reuse container.
	XLOLR E. coli Strain	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
	ExAssist Interference-Resistant Helper Phage	Put on appropriate personal protective equipment (see Section 8).
	R408 Interference-Resistant Helper Phage	Put on appropriate personal protective equipment (see Section 8).
	Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	Put on appropriate personal protective equipment (see Section 8).
<b>Advice on general occupational hygiene</b>	: pBR322 Test Insert Digested With EcoR I and Sal I	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.
	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.
	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.
	Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	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

## Section 7. Handling and storage

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

: pBR322 Test Insert Digested With EcoR I and Sal I

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

XL1-Blue MRF' 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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

XL0LR 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 unlabeled 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 unlabeled 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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for

## Section 7. Handling and storage

Lambda ZAP-CMV XR Vector  
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CIAP Treated

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 unlabeled 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

: pBR322 Test Insert Digested With EcoR I and Sal I	Industrial applications, Professional applications.
XL1-Blue MRF' E.coli Strain	Industrial applications, Professional applications.
XL0LR E. coli Strain	Industrial applications, Professional applications.
ExAssist Interference-Resistant Helper Phage	Industrial applications, Professional applications.
R408 Interference-Resistant Helper Phage	Industrial applications, Professional applications.
Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	Industrial applications, Professional applications.

#### Industrial sector specific solutions

: pBR322 Test Insert Digested With EcoR I and Sal I	Not available.
XL1-Blue MRF' E.coli Strain	Not available.
XL0LR E. coli Strain	Not available.
ExAssist Interference-Resistant Helper Phage	Not available.
R408 Interference-Resistant Helper Phage	Not available.
Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	Not available.

## Section 8. Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
<p><b>XL1-Blue MRF' E.coli Strain</b> Glycerol</p> <p>Sodium chloride</p> <p><b>XL0LR E. coli Strain</b> Glycerol</p>	<p><b>OSHA PEL 1989 (United States, 3/1989).</b> TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction TWA: 10 mg/m<sup>3</sup> 8 hours. Form: Total dust</p> <p><b>OSHA PEL (United States, 5/2018).</b> TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction TWA: 15 mg/m<sup>3</sup> 8 hours. Form: Total dust</p> <p>None.</p> <p><b>OSHA PEL 1989 (United States, 3/1989).</b> TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction</p>

## Section 8. Exposure controls/personal protection

Sodium chloride	<p>TWA: 10 mg/m<sup>3</sup> 8 hours. Form: Total dust  <b>OSHA PEL (United States, 5/2018).</b>  TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction  TWA: 15 mg/m<sup>3</sup> 8 hours. Form: Total dust  None.</p>
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### 8.2 Exposure controls

#### Appropriate engineering controls

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

#### Environmental exposure controls

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

### Individual protection measures

#### Hygiene measures

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

#### Eye/face protection

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

### Skin protection

#### Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

#### Body protection

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

#### Other skin protection

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

#### Respiratory protection

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

## Section 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

## Section 9. Physical and chemical properties

<b>Physical state</b>	:	pBR322 Test Insert Digested With EcoR I and Sal I	Liquid.
		XL1-Blue MRF' E.coli Strain	Liquid.
		XLOLR E. coli Strain	Liquid.
		ExAssist Interference-Resistant Helper Phage	Liquid.
		R408 Interference-Resistant Helper Phage	Liquid.
		Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	Liquid.
<b>Color</b>	:	pBR322 Test Insert Digested With EcoR I and Sal I	Not available.
		XL1-Blue MRF' E.coli Strain	Not available.
		XLOLR E. coli Strain	Not available.
		ExAssist Interference-Resistant Helper Phage	Not available.
		R408 Interference-Resistant Helper Phage	Not available.
		Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	Not available.
<b>Odor</b>	:	pBR322 Test Insert Digested With EcoR I and Sal I	Not available.
		XL1-Blue MRF' E.coli Strain	Not available.
		XLOLR E. coli Strain	Not available.
		ExAssist Interference-Resistant Helper Phage	Not available.
		R408 Interference-Resistant Helper Phage	Not available.
		Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	Not available.
<b>Odor threshold</b>	:	pBR322 Test Insert Digested With EcoR I and Sal I	Not available.
		XL1-Blue MRF' E.coli Strain	Not available.
		XLOLR E. coli Strain	Not available.
		ExAssist Interference-Resistant Helper Phage	Not available.
		R408 Interference-Resistant Helper Phage	Not available.
		Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	Not available.
<b>pH</b>	:	pBR322 Test Insert Digested With EcoR I and Sal I	7.5
		XL1-Blue MRF' E.coli Strain	7
		XLOLR E. coli Strain	7
		ExAssist Interference-Resistant Helper Phage	7.5
		R408 Interference-Resistant Helper Phage	7.5
		Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	7.5

## Section 9. Physical and chemical properties

<b>Melting point</b>	: pBR322 Test Insert Digested With EcoR I and Sal I XL1-Blue MRF' E.coli Strain XL0LR E. coli Strain ExAssist Interference-Resistant Helper Phage R408 Interference-Resistant Helper Phage Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	0°C (32°F) Not available. Not available. 0°C (32°F) 0°C (32°F) 0°C (32°F)
<b>Boiling point</b>	: pBR322 Test Insert Digested With EcoR I and Sal I XL1-Blue MRF' E.coli Strain XL0LR E. coli Strain ExAssist Interference-Resistant Helper Phage R408 Interference-Resistant Helper Phage Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	100°C (212°F) Not available. Not available. 100°C (212°F) 100°C (212°F) 100°C (212°F)
<b>Flash point</b>	: pBR322 Test Insert Digested With EcoR I and Sal I XL1-Blue MRF' E.coli Strain XL0LR E. coli Strain ExAssist Interference-Resistant Helper Phage R408 Interference-Resistant Helper Phage Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	Not available. Not available. Not available. Not available. Not available. Not available.
<b>Evaporation rate</b>	: pBR322 Test Insert Digested With EcoR I and Sal I XL1-Blue MRF' E.coli Strain XL0LR E. coli Strain ExAssist Interference-Resistant Helper Phage R408 Interference-Resistant Helper Phage Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	Not available. Not available. Not available. Not available. Not available. Not available.
<b>Flammability (solid, gas)</b>	: pBR322 Test Insert Digested With EcoR I and Sal I XL1-Blue MRF' E.coli Strain XL0LR E. coli Strain ExAssist Interference-Resistant Helper Phage R408 Interference-Resistant Helper Phage Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.

## Section 9. Physical and chemical properties

<b>Lower and upper explosive (flammable) limits</b>	: pBR322 Test Insert Digested With EcoR I and Sal I XL1-Blue MRF' E.coli Strain XL0LR E. coli Strain ExAssist Interference-Resistant Helper Phage R408 Interference-Resistant Helper Phage Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	Not available. Not available. Not available. Not available. Not available. Not available.
<b>Vapor pressure</b>	: pBR322 Test Insert Digested With EcoR I and Sal I XL1-Blue MRF' E.coli Strain XL0LR E. coli Strain ExAssist Interference-Resistant Helper Phage R408 Interference-Resistant Helper Phage Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	Not available. Not available. Not available. Not available. Not available. Not available.
<b>Vapor density</b>	: pBR322 Test Insert Digested With EcoR I and Sal I XL1-Blue MRF' E.coli Strain XL0LR E. coli Strain ExAssist Interference-Resistant Helper Phage R408 Interference-Resistant Helper Phage Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	Not available. Not available. Not available. Not available. Not available. Not available.
<b>Relative density</b>	: pBR322 Test Insert Digested With EcoR I and Sal I XL1-Blue MRF' E.coli Strain XL0LR E. coli Strain ExAssist Interference-Resistant Helper Phage R408 Interference-Resistant Helper Phage Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	Not available. Not available. Not available. Not available. Not available. Not available.
<b>Solubility</b>	: pBR322 Test Insert Digested With EcoR I and Sal I XL1-Blue MRF' E.coli Strain  XL0LR E. coli Strain  ExAssist Interference-Resistant Helper Phage R408 Interference-Resistant Helper Phage Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	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. Easily soluble in the following materials: cold water and hot water. Easily soluble in the following materials: cold water and hot water.

## Section 9. Physical and chemical properties

<b>Partition coefficient: n-octanol/water</b>	: pBR322 Test Insert Digested With EcoR I and Sal I XL1-Blue MRF' E.coli Strain XL0LR E. coli Strain ExAssist Interference-Resistant Helper Phage R408 Interference-Resistant Helper Phage Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	Not available. Not available. Not available. Not available. Not available. Not available.
<b>Auto-ignition temperature</b>	: pBR322 Test Insert Digested With EcoR I and Sal I XL1-Blue MRF' E.coli Strain XL0LR E. coli Strain ExAssist Interference-Resistant Helper Phage R408 Interference-Resistant Helper Phage Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	Not available. Not available. Not available. Not available. Not available. Not available.
<b>Decomposition temperature</b>	: pBR322 Test Insert Digested With EcoR I and Sal I XL1-Blue MRF' E.coli Strain XL0LR E. coli Strain ExAssist Interference-Resistant Helper Phage R408 Interference-Resistant Helper Phage Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	Not available. Not available. Not available. Not available. Not available. Not available.
<b>Viscosity</b>	: pBR322 Test Insert Digested With EcoR I and Sal I XL1-Blue MRF' E.coli Strain XL0LR E. coli Strain ExAssist Interference-Resistant Helper Phage R408 Interference-Resistant Helper Phage Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	Not available. Not available. Not available. Not available. Not available. Not available.

## Section 10. Stability and reactivity

<b>10.1 Reactivity</b>	: pBR322 Test Insert Digested With EcoR I and Sal I XL1-Blue MRF' E.coli Strain  XL0LR E. coli Strain  ExAssist Interference-Resistant Helper Phage R408 Interference-Resistant Helper Phage Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I	No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients.
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## Section 10. Stability and reactivity

CIAP Treated

- |  |   |  |
|--|---|--|
| <b>10.2 Chemical stability</b>                 | : pBR322 Test Insert Digested With EcoR I and Sal I<br>XL1-Blue MRF' E.coli Strain<br>XL0LR E. coli Strain<br>ExAssist Interference-Resistant Helper Phage<br>R408 Interference-Resistant Helper Phage<br>Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I<br>CIAP Treated         | The product is stable.<br>The product is stable.<br>The product is stable.<br>The product is stable.<br>The product is stable.<br>The product is stable.   |
| <b>10.3 Possibility of hazardous reactions</b> | : pBR322 Test Insert Digested With EcoR I and Sal I<br>XL1-Blue MRF' E.coli Strain<br><br>XL0LR E. coli Strain<br><br>ExAssist Interference-Resistant Helper Phage<br>R408 Interference-Resistant Helper Phage<br>Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I<br>CIAP Treated | Under normal conditions of storage and use, hazardous reactions will not occur.<br>Under normal conditions of storage and use, hazardous reactions will not occur.<br>Under normal conditions of storage and use, hazardous reactions will not occur.<br>Under normal conditions of storage and use, hazardous reactions will not occur.<br>Under normal conditions of storage and use, hazardous reactions will not occur.<br>Under normal conditions of storage and use, hazardous reactions will not occur. |
| <b>10.4 Conditions to avoid</b>                | : pBR322 Test Insert Digested With EcoR I and Sal I<br>XL1-Blue MRF' E.coli Strain<br>XL0LR E. coli Strain<br>ExAssist Interference-Resistant Helper Phage<br>R408 Interference-Resistant Helper Phage<br>Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I<br>CIAP Treated         | No specific data.<br>No specific data.<br>No specific data.<br>No specific data.<br>No specific data.<br>No specific data.   |
| <b>10.5 Incompatible materials</b>             | : pBR322 Test Insert Digested With EcoR I and Sal I<br>XL1-Blue MRF' E.coli Strain<br><br>XL0LR E. coli Strain<br><br>ExAssist Interference-Resistant Helper Phage<br>R408 Interference-Resistant Helper Phage<br>Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I<br>CIAP Treated | May react or be incompatible with oxidizing materials.<br>May react or be incompatible with oxidizing materials.<br>May react or be incompatible with oxidizing materials.<br>May react or be incompatible with oxidizing materials.<br>May react or be incompatible with oxidizing materials.<br>May react or be incompatible with oxidizing materials.   |

## Section 10. Stability and reactivity

<b>10.6 Hazardous decomposition products</b>	: pBR322 Test Insert Digested With EcoR I and Sal I	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.
	ExAssist Interference-Resistant Helper Phage	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.
	Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	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>XL1-Blue MRF' E.coli Strain</b> Glycerol Sodium chloride	LD50 Oral	Rat	12600 mg/kg	-
	LD50 Oral	Rat	3000 mg/kg	-
<b>XLOLR E. coli Strain</b> Glycerol Sodium chloride	LD50 Oral	Rat	12600 mg/kg	-
	LD50 Oral	Rat	3000 mg/kg	-

#### Irritation/Corrosion

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

#### Sensitization

## Section 11. Toxicological information

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.

<b>Information on the likely routes of exposure</b>	: pBR322 Test Insert Digested With EcoR I and Sal I	Not available.
	XL1-Blue MRF' E.coli Strain	Routes of entry anticipated: Oral, Dermal, Inhalation.
	XL0LR E. coli Strain	Routes of entry anticipated: Oral, Dermal, Inhalation.
	ExAssist Interference-Resistant Helper Phage	Not available.
	R408 Interference-Resistant Helper Phage	Not available.
	Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I	Not available.
	CIAP Treated	

### Potential acute health effects

<b>Eye contact</b>	: pBR322 Test Insert Digested With EcoR I and Sal I	No known significant effects or critical hazards.
	XL1-Blue MRF' E.coli Strain	Causes serious eye irritation.
	XL0LR E. coli Strain	Causes serious eye irritation.
	ExAssist Interference-Resistant Helper Phage	No known significant effects or critical hazards.
	R408 Interference-Resistant Helper Phage	No known significant effects or critical hazards.
	Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I	No known significant effects or critical hazards.
	CIAP Treated	
<b>Inhalation</b>	: pBR322 Test Insert Digested With EcoR I and Sal I	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.
	ExAssist Interference-Resistant Helper Phage	No known significant effects or critical hazards.
	R408 Interference-Resistant Helper Phage	No known significant effects or critical hazards.
	Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I	No known significant effects or critical hazards.
	CIAP Treated	

## Section 11. Toxicological information

<b>Skin contact</b>	: pBR322 Test Insert Digested With EcoR I and Sal I	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.
	ExAssist Interference-Resistant Helper Phage	No known significant effects or critical hazards.
	R408 Interference-Resistant Helper Phage	No known significant effects or critical hazards.
	Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	No known significant effects or critical hazards.
<b>Ingestion</b>	: pBR322 Test Insert Digested With EcoR I and Sal I	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.
	ExAssist Interference-Resistant Helper Phage	No known significant effects or critical hazards.
	R408 Interference-Resistant Helper Phage	No known significant effects or critical hazards.
	Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	No known significant effects or critical hazards.

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

<b>Eye contact</b>	: pBR322 Test Insert Digested With EcoR I and Sal I	No specific data.
	XL1-Blue MRF' E.coli Strain	Adverse symptoms may include the following: pain or irritation watering redness
	XL0LR E. coli Strain	Adverse symptoms may include the following: pain or irritation watering redness
	ExAssist Interference-Resistant Helper Phage	No specific data.
	R408 Interference-Resistant Helper Phage	No specific data.
	Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	No specific data.
<b>Inhalation</b>	: pBR322 Test Insert Digested With EcoR I and Sal I	No specific data.
	XL1-Blue MRF' E.coli Strain	No specific data.
	XL0LR E. coli Strain	No specific data.
	ExAssist Interference-Resistant Helper Phage	No specific data.
	R408 Interference-Resistant Helper Phage	No specific data.
	Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	No specific data.

## Section 11. Toxicological information

<b>Skin contact</b>	: pBR322 Test Insert Digested With EcoR I and Sal I	No specific data.
	XL1-Blue MRF' E.coli Strain	No specific data.
	XL0LR E. coli Strain	No specific data.
	ExAssist Interference-Resistant Helper Phage	No specific data.
	R408 Interference-Resistant Helper Phage	No specific data.
	Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I	No specific data.
	CIAP Treated	
<b>Ingestion</b>	: pBR322 Test Insert Digested With EcoR I and Sal I	No specific data.
	XL1-Blue MRF' E.coli Strain	No specific data.
	XL0LR E. coli Strain	No specific data.
	ExAssist Interference-Resistant Helper Phage	No specific data.
	R408 Interference-Resistant Helper Phage	No specific data.
	Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I	No specific data.
	CIAP Treated	

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Potential chronic health effects

<b>General</b>	: pBR322 Test Insert Digested With EcoR I and Sal I	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.
	ExAssist Interference-Resistant Helper Phage	No known significant effects or critical hazards.
	R408 Interference-Resistant Helper Phage	No known significant effects or critical hazards.
	Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I	No known significant effects or critical hazards.
	CIAP Treated	
<b>Carcinogenicity</b>	: pBR322 Test Insert Digested With EcoR I and Sal I	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.
	ExAssist Interference-Resistant Helper Phage	No known significant effects or critical hazards.
	R408 Interference-Resistant Helper Phage	No known significant effects or critical hazards.
	Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I	No known significant effects or critical hazards.
	CIAP Treated	

## Section 11. Toxicological information

<b>Mutagenicity</b>	: pBR322 Test Insert Digested With EcoR I and Sal I XL1-Blue MRF' E.coli Strain XLOLR E. coli Strain ExAssist Interference-Resistant Helper Phage R408 Interference-Resistant Helper Phage Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	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>	: pBR322 Test Insert Digested With EcoR I and Sal I XL1-Blue MRF' E.coli Strain XLOLR E. coli Strain ExAssist Interference-Resistant Helper Phage R408 Interference-Resistant Helper Phage Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I CIAP Treated	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.

### Numerical measures of toxicity

#### Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
<b>XL1-Blue MRF' E.coli Strain</b> XL1-Blue MRF' E.coli Strain Glycerol Sodium chloride	300000 12600 3000	N/A N/A N/A	N/A N/A N/A	N/A N/A N/A	N/A N/A N/A
<b>XLOLR E. coli Strain</b> XLOLR E. coli Strain Glycerol Sodium chloride	300000 12600 3000	N/A N/A N/A	N/A N/A N/A	N/A N/A N/A	N/A N/A N/A

## Section 12. Ecological information

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
<b>XL1-Blue MRF' E.coli Strain</b> Glycerol Sodium chloride	Acute LC50 54000 mg/l Fresh water Acute EC50 4.74 g/L Fresh water  Acute EC50 519.6 mg/l Fresh water Acute IC50 6.87 g/L Fresh water Acute LC50 1000000 µg/l Fresh water Chronic LC10 781 mg/l Fresh water	Fish - Oncorhynchus mykiss Algae - Chlamydomonas reinhardtii Crustaceans - Cypris subglobosa Aquatic plants - Lemna minor Fish - Morone saxatilis - Larvae Crustaceans - Hyalella azteca - Juvenile (Fledgling, Hatchling, Weanling)	96 hours 96 hours  48 hours 96 hours 96 hours 3 weeks

## Section 12. Ecological information

<b>XL0LR E. coli Strain</b> Glycerol Sodium chloride	Chronic NOEC 6 g/L Fresh water Chronic NOEC 0.314 g/L Fresh water Chronic NOEC 100 mg/l Fresh water	Aquatic plants - Lemna minor Daphnia - Daphnia pulex Fish - Gambusia holbrooki - Adult	96 hours 21 days 8 weeks
	Acute LC50 54000 mg/l Fresh water Acute EC50 4.74 g/L Fresh water	Fish - Oncorhynchus mykiss Algae - Chlamydomonas reinhardtii	96 hours 96 hours
	Acute EC50 519.6 mg/l Fresh water Acute IC50 6.87 g/L Fresh water Acute LC50 1000000 µg/l Fresh water Chronic LC10 781 mg/l Fresh water	Crustaceans - Cypris subglobosa Aquatic plants - Lemna minor Fish - Morone saxatilis - Larvae Crustaceans - Hyalella azteca - Juvenile (Fledgling, Hatchling, Weanling)	48 hours 96 hours 96 hours 3 weeks
	Chronic NOEC 6 g/L Fresh water Chronic NOEC 0.314 g/L Fresh water Chronic NOEC 100 mg/l Fresh water	Aquatic plants - Lemna minor Daphnia - Daphnia pulex Fish - Gambusia holbrooki - Adult	96 hours 21 days 8 weeks

### 12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
<b>XL1-Blue MRF' E.coli Strain</b> Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-
<b>XL0LR E. coli Strain</b> Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-

### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<b>XL1-Blue MRF' E.coli Strain</b> Glycerol	-1.76	-	low
<b>XL0LR E. coli Strain</b> Glycerol	-1.76	-	low

### 12.4 Mobility in soil

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

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

## Section 13. Disposal considerations

### 13.1 Waste treatment methods

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

## Section 14. Transport information

**DOT / TDG / Mexico / IMDG / IATA** : Not regulated.

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

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

## Section 15. Regulatory information

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

**U.S. Federal regulations** : **TSCA 8(a) CDR Exempt/Partial exemption:** Not determined  
**Clean Water Act (CWA) 311:** Edetic acid

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Not listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

## Section 15. Regulatory information

### SARA 302/304

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

### SARA 311/312

**Classification** :

pBR322 Test Insert Digested With EcoR I and Sal I	Not applicable.
XL1-Blue MRF' E.coli Strain	EYE IRRITATION - Category 2A
XL0LR E. coli Strain	EYE IRRITATION - Category 2A
ExAssist Interference-Resistant Helper Phage	Not applicable.
R408 Interference-Resistant Helper Phage	Not applicable.
Lambda ZAP-CMV XR Vector Digested With Xho I And EcoR I	Not applicable.
CIAP Treated	

#### Composition/information on ingredients

Name	%	Classification
<b>XL1-Blue MRF' E.coli Strain</b>		
Glycerol	≥10 - ≤25	EYE IRRITATION - Category 2B
Sodium chloride	≤3	EYE IRRITATION - Category 2A
<b>XL0LR E. coli Strain</b>		
Glycerol	≥10 - ≤25	EYE IRRITATION - Category 2B
Sodium chloride	≤3	EYE IRRITATION - Category 2A

### State regulations

**Massachusetts** : The following components are listed: GLYCERINE MIST

**New York** : None of the components are listed.

**New Jersey** : The following components are listed: GLYCERIN; 1,2,3-PROPANETRIOL

**Pennsylvania** : The following components are listed: 1,2,3-PROPANETRIOL

### California Prop. 65

**⚠ WARNING:** This product can expose you to Tetracycline, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

Ingredient name	No significant risk level	Maximum acceptable dosage level
<b>XL0LR E. coli Strain</b> Tetracycline	-	-

### 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)

## Section 15. Regulatory information

Not listed.

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

Not listed.

### [Inventory list](#)

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

## Section 16. Other information

### [History](#)

<b>Date of issue</b>	: 11/04/2020
<b>Date of previous issue</b>	: 08/27/2018
<b>Version</b>	: 6

### [Key to abbreviations](#)

: ATE = Acute Toxicity Estimate
: BCF = Bioconcentration Factor
: GHS = Globally Harmonized System of Classification and Labelling of Chemicals
: IATA = International Air Transport Association
: IBC = Intermediate Bulk Container
: IMDG = International Maritime Dangerous Goods
: LogPow = logarithm of the octanol/water partition coefficient
: MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
: N/A = Not available
: UN = United Nations

### [Procedure used to derive the classification](#)

Classification	Justification
<input checked="" type="checkbox"/> <b>L1-Blue MRF' E.coli Strain</b> EYE IRRITATION - Category 2A	Calculation method
<b>XL0LR E. coli Strain</b> EYE IRRITATION - Category 2A	Calculation method

Indicates information that has changed from previously issued version.

### [Notice to reader](#)

**Disclaimer: The information contained in this document is based on Agilent's state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.**