

# SAFETY DATA SHEET

Lambda Select-cII Mutation Detection System for Big Blue Rodents, Part Number 720120

## Section 1. Identification

### 1.1 Product identifier

**Product name** : Lambda Select-cII Mutation Detection System for Big Blue Rodents, Part Number 720120

**Part no. (chemical kit)** : 720120

**Part no.** :

Transpack Blue Tube	200220-41
Transpack Red Tube	200220-42
Big Blue Control Genomic DNA	200220-43
SCS-8 E. coli Strain	200288-81
G1250 E. coli Host Strain	720120-81
Control Phage Solution	720120-82

**Validation date** : 5/23/2018

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

**Material uses** : Analytical reagent.

Transpack packaging extract-Blue	1.4 ml
Transpack packaging extract-Red	1 ml
Big Blue Control Genomic DNA	0.02 ml
SCS-8 E. coli Strain	1 ml
G1250 E. coli Host Strain	1 ml
Control Phage Solution	0.125 ml

### 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

<b>OSHA/HCS status</b> :	<p>Transpack Blue Tube</p> <p>Transpack Red Tube</p> <p>Big Blue Control Genomic DNA</p>	<p>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.</p> <p>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.</p> <p>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.</p>
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## Section 2. Hazards identification

SCS-8 E. coli Strain	other users of this product.
G1250 E. coli Host Strain	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Control Phage Solution	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). 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

#### SCS-8 E. coli Strain

H319 EYE IRRITATION - Category 2A

#### G1250 E. coli Host Strain




H319 EYE IRRITATION - Category 2A  
 H373 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (kidneys) (inhalation) - Category 2

#### Ingredients of unknown toxicity

Transpack Blue Tube	Percentage of the mixture consisting of ingredient (s) of unknown inhalation toxicity: 1 - 10%
Transpack Red Tube	Percentage of the mixture consisting of ingredient (s) of unknown inhalation toxicity: 1 - 10%
SCS-8 E. coli Strain	Percentage of the mixture consisting of ingredient (s) of unknown inhalation toxicity: 10 - 30%
G1250 E. coli Host Strain	Percentage of the mixture consisting of ingredient (s) of unknown inhalation toxicity: 10 - 30%

### 2.2 GHS label elements

#### Hazard pictograms

SCS-8 E. coli Strain	
G1250 E. coli Host Strain	 

#### Signal word

Transpack Blue Tube	No signal word.
Transpack Red Tube	No signal word.
Big Blue Control Genomic DNA	No signal word.
SCS-8 E. coli Strain	Warning
G1250 E. coli Host Strain	Warning
Control Phage Solution	No signal word.

#### Hazard statements

Transpack Blue Tube	No known significant effects or critical hazards.
Transpack Red Tube	No known significant effects or critical hazards.
Big Blue Control Genomic DNA	No known significant effects or critical hazards.
SCS-8 E. coli Strain	H319 - Causes serious eye irritation.
G1250 E. coli Host Strain	H319 - Causes serious eye irritation. H373 - May cause damage to organs through prolonged or repeated exposure if inhaled. (kidneys)
Control Phage Solution	No known significant effects or critical hazards.

#### Precautionary statements

## Section 2. Hazards identification

### Prevention

: Transpack Blue Tube	Not applicable.
Transpack Red Tube	Not applicable.
Big Blue Control Genomic DNA	Not applicable.
SCS-8 E. coli Strain	P280 - Wear eye or face protection.
G1250 E. coli Host Strain	P264 - Wash hands thoroughly after handling.
	P280 - Wear eye or face protection.
	P260 - Do not breathe vapor.
	P264 - Wash hands thoroughly after handling.
Control Phage Solution	Not applicable.

### Response

: Transpack Blue Tube	Not applicable.
Transpack Red Tube	Not applicable.
Big Blue Control Genomic DNA	Not applicable.
SCS-8 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.
G1250 E. coli Host Strain	P337 + P313 - If eye irritation persists: Get medical attention.
	P314 - Get medical attention if you feel unwell.
	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 attention.

### Storage

Control Phage Solution	Not applicable.
: Transpack Blue Tube	Not applicable.
Transpack Red Tube	Not applicable.
Big Blue Control Genomic DNA	Not applicable.
SCS-8 E. coli Strain	Not applicable.
G1250 E. coli Host Strain	Not applicable.
Control Phage Solution	Not applicable.

### Disposal

: Transpack Blue Tube	Not applicable.
Transpack Red Tube	Not applicable.
Big Blue Control Genomic DNA	Not applicable.
SCS-8 E. coli Strain	Not applicable.
G1250 E. coli Host Strain	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

### Supplemental label elements

Control Phage Solution	Not applicable.
: Transpack Blue Tube	None known.
Transpack Red Tube	None known.
Big Blue Control Genomic DNA	None known.
SCS-8 E. coli Strain	None known.
G1250 E. coli Host Strain	None known.
Control Phage Solution	None known.

### 2.3 Other hazards

#### Hazards not otherwise classified

: Transpack Blue Tube	None known.
Transpack Red Tube	None known.
Big Blue Control Genomic DNA	None known.
SCS-8 E. coli Strain	None known.
G1250 E. coli Host Strain	None known.
Control Phage Solution	None known.

### Section 3. Composition/information on ingredients

<b>Substance/mixture</b>	: Transpack Blue Tube	Mixture
	Transpack Red Tube	Mixture
	Big Blue Control Genomic DNA	Mixture
	SCS-8 E. coli Strain	Mixture
	G1250 E. coli Host Strain	Mixture
	Control Phage Solution	Mixture

Ingredient name	%	CAS number
<b>SCS-8 E. coli Strain</b>		
Glycerol	≥10 - ≤25	56-81-5
Sodium chloride	≤3	7647-14-5
<b>G1250 E. coli Host 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>	: Transpack Blue Tube	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.
	Transpack Red Tube	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.
	Big Blue Control Genomic DNA	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.
	SCS-8 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.
	G1250 E. coli Host 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.
	Control Phage Solution	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

## Section 4. First aid measures

<b>Inhalation</b>	:  Transpack Blue Tube	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	Transpack Red Tube	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	Big Blue Control Genomic DNA	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	SCS-8 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.
	G1250 E. coli Host 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 following exposure or if feeling unwell. 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.
	Control Phage Solution	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>	:  Transpack Blue Tube	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Transpack Red Tube	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Big Blue Control Genomic DNA	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	SCS-8 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.
	G1250 E. coli Host Strain	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	Control Phage Solution	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

## Section 4. First aid measures

### Ingestion

: Transpack Blue Tube

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.

Transpack Red Tube

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.

Big Blue Control Genomic DNA

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.

SCS-8 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.

G1250 E. coli Host 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 following exposure or if feeling unwell. 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.

Control Phage Solution

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



## Section 4. First aid measures

medical attention if symptoms occur.

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

#### Potential acute health effects

<b>Eye contact</b>	: Transpack Blue Tube Transpack Red Tube Big Blue Control Genomic DNA SCS-8 E. coli Strain G1250 E. coli Host Strain Control Phage Solution	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. Causes serious eye irritation. Causes serious eye irritation. No known significant effects or critical hazards.
<b>Inhalation</b>	: Transpack Blue Tube Transpack Red Tube Big Blue Control Genomic DNA SCS-8 E. coli Strain G1250 E. coli Host Strain Control Phage Solution	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>	: Transpack Blue Tube Transpack Red Tube Big Blue Control Genomic DNA SCS-8 E. coli Strain G1250 E. coli Host Strain Control Phage Solution	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>	: Transpack Blue Tube Transpack Red Tube Big Blue Control Genomic DNA SCS-8 E. coli Strain G1250 E. coli Host Strain Control Phage Solution	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>	: Transpack Blue Tube Transpack Red Tube Big Blue Control Genomic DNA SCS-8 E. coli Strain  G1250 E. coli Host Strain  Control Phage Solution	No specific data. No specific data. No specific data. Adverse symptoms may include the following: pain or irritation watering redness Adverse symptoms may include the following: pain or irritation watering redness No specific data.
<b>Inhalation</b>	: Transpack Blue Tube Transpack Red Tube Big Blue Control Genomic DNA SCS-8 E. coli Strain G1250 E. coli Host Strain Control Phage Solution	No specific data. No specific data. No specific data. No specific data. No specific data. No specific data.
<b>Skin contact</b>	: Transpack Blue Tube Transpack Red Tube Big Blue Control Genomic DNA SCS-8 E. coli Strain G1250 E. coli Host Strain Control Phage Solution	No specific data. No specific data. No specific data. No specific data. No specific data. No specific data.

## Section 4. First aid measures

<b>Ingestion</b>	<b>:</b> Transpack Blue Tube	No specific data.
	Transpack Red Tube	No specific data.
	Big Blue Control Genomic DNA	No specific data.
	SCS-8 E. coli Strain	No specific data.
	G1250 E. coli Host Strain	No specific data.
	Control Phage Solution	No specific data.

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

<b>Notes to physician</b>	<b>:</b> Transpack Blue Tube	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	Transpack Red Tube	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	Big Blue Control Genomic DNA	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	SCS-8 E. coli Strain	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	G1250 E. coli Host Strain	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	Control Phage Solution	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
<b>Specific treatments</b>	<b>:</b> Transpack Blue Tube	No specific treatment.
	Transpack Red Tube	No specific treatment.
	Big Blue Control Genomic DNA	No specific treatment.
	SCS-8 E. coli Strain	No specific treatment.
	G1250 E. coli Host Strain	No specific treatment.
	Control Phage Solution	No specific treatment.
<b>Protection of first-aiders</b>	<b>:</b> Transpack Blue Tube	No action shall be taken involving any personal risk or without suitable training.
	Transpack Red Tube	No action shall be taken involving any personal risk or without suitable training.
	Big Blue Control Genomic DNA	No action shall be taken involving any personal risk or without suitable training.
	SCS-8 E. coli Strain	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.
	G1250 E. coli Host Strain	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.
	Control Phage Solution	No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)



## Section 5. Fire-fighting measures

### 5.1 Extinguishing media

<b>Suitable extinguishing media</b>	: Transpack Blue Tube	Use an extinguishing agent suitable for the surrounding fire.
	Transpack Red Tube	Use an extinguishing agent suitable for the surrounding fire.
	Big Blue Control Genomic DNA	Use an extinguishing agent suitable for the surrounding fire.
	SCS-8 E. coli Strain	Use an extinguishing agent suitable for the surrounding fire.
	G1250 E. coli Host Strain	Use an extinguishing agent suitable for the surrounding fire.
	Control Phage Solution	Use an extinguishing agent suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	: Transpack Blue Tube	None known.
	Transpack Red Tube	None known.
	Big Blue Control Genomic DNA	None known.
	SCS-8 E. coli Strain	None known.
	G1250 E. coli Host Strain	None known.
	Control Phage Solution	None known.

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

<b>Specific hazards arising from the chemical</b>	: Transpack Blue Tube	In a fire or if heated, a pressure increase will occur and the container may burst.
	Transpack Red Tube	In a fire or if heated, a pressure increase will occur and the container may burst.
	Big Blue Control Genomic DNA	In a fire or if heated, a pressure increase will occur and the container may burst.
	SCS-8 E. coli Strain	In a fire or if heated, a pressure increase will occur and the container may burst.
	G1250 E. coli Host Strain	In a fire or if heated, a pressure increase will occur and the container may burst.
	Control Phage Solution	In a fire or if heated, a pressure increase will occur and the container may burst.
<b>Hazardous thermal decomposition products</b>	: Transpack Blue Tube	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	Transpack Red Tube	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	Big Blue Control Genomic DNA	No specific data.
	SCS-8 E. coli Strain	Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds metal oxide/oxides
	G1250 E. coli Host Strain	Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds metal oxide/oxides
	Control Phage Solution	No specific data.

## Section 5. Fire-fighting measures

### 5.3 Advice for firefighters

#### Special protective actions for fire-fighters

: ranspack Blue Tube

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.

Transpack Red Tube

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.

Big Blue Control Genomic DNA

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.

SCS-8 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.

G1250 E. coli Host 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.

Control Phage Solution

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.

#### Special protective equipment for fire-fighters

: ranspack Blue Tube

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Transpack Red Tube

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Big Blue Control Genomic DNA

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SCS-8 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.

G1250 E. coli Host Strain

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Control Phage Solution

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

**For non-emergency personnel**

: Transpack Blue Tube

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.

Transpack Red Tube

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.

Big Blue Control Genomic DNA

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.

SCS-8 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.

G1250 E. coli Host 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.

Control Phage Solution

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.

**For emergency responders**

: Transpack Blue Tube

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".

Transpack Red Tube

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".

Big Blue Control Genomic DNA

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".


SCS-8 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

## Section 6. Accidental release measures


G1250 E. coli Host Strain	the information in "For non-emergency personnel". 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".
Control Phage Solution	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".

### 6.2 Environmental precautions

:  Transpack Blue Tube	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).
Transpack Red Tube	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).
Big Blue Control Genomic DNA	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).
SCS-8 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).
G1250 E. coli Host 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).
Control Phage Solution	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

#### Methods for cleaning up

:  Transpack Blue Tube	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.
Transpack Red Tube	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.
Big Blue Control Genomic DNA	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

## Section 6. Accidental release measures

SCS-8 E. coli Strain	<p>inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.</p> <p>Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.</p>
G1250 E. coli Host Strain	<p>Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.</p>
Control Phage Solution	<p>Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.</p>

## Section 7. Handling and storage


### 7.1 Precautions for safe handling

<b>Protective measures</b>	<p>: Transpack Blue Tube</p> <p>Transpack Red Tube</p> <p>Big Blue Control Genomic DNA</p> <p>SCS-8 E. coli Strain</p> <p>G1250 E. coli Host Strain</p> <p>Control Phage Solution</p>	<p>Put on appropriate personal protective equipment (see Section 8).</p> <p>Put on appropriate personal protective equipment (see Section 8).</p> <p>Put on appropriate personal protective equipment (see Section 8).</p> <p>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.</p> <p>Put on appropriate personal protective equipment (see Section 8). Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.</p> <p>Put on appropriate personal protective equipment (see Section 8).</p>
<b>Advice on general occupational hygiene</b>	<p>: Transpack Blue Tube</p> <p>Transpack Red Tube</p>	<p>Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face</p>

## Section 7. Handling and storage

Big Blue Control Genomic DNA	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. 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.
SCS-8 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.
G1250 E. coli Host 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.
Control Phage Solution	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.

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

:  Transpack Blue Tube	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.
Transpack Red Tube	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.
Big Blue Control Genomic DNA	Store in accordance with local regulations. Store in original container protected from direct sunlight in a



## Section 7. Handling and storage

SCS-8 E. coli Strain

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. 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.

G1250 E. coli Host 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.

Control Phage Solution

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

- |                              |   |
|------------------------------|---|
| : Transpack Blue Tube        | Industrial applications, Professional applications. |
| Transpack Red Tube           | Industrial applications, Professional applications. |
| Big Blue Control Genomic DNA | Industrial applications, Professional applications. |
| SCS-8 E. coli Strain         | Industrial applications, Professional applications. |
| G1250 E. coli Host Strain    | Industrial applications, Professional applications. |
| Control Phage Solution       | Industrial applications, Professional applications. |

#### Industrial sector specific solutions

- |                              |                 |
|------------------------------|-----------------|
| : Transpack Blue Tube        | Not applicable. |
| Transpack Red Tube           | Not applicable. |
| Big Blue Control Genomic DNA | Not applicable. |
| SCS-8 E. coli Strain         | Not applicable. |
| G1250 E. coli Host Strain    | Not applicable. |
| Control Phage Solution       | Not applicable. |

## Section 8. Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
<p><b>CS-8 E. coli Strain</b> Glycerol</p> <p>Sodium chloride</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 <b>OSHA PEL (United States, 6/2016).</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>
<p><b>G1250 E. coli Host Strain</b> Glycerol</p> <p>Sodium chloride</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 <b>OSHA PEL (United States, 6/2016).</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>

### 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: 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.

## Section 8. Exposure controls/personal protection

- 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

<b>Physical state</b>	:	<ul style="list-style-type: none"> <li>Transpack Blue Tube</li> <li>Transpack Red Tube</li> <li>Big Blue Control Genomic DNA</li> <li>SCS-8 E. coli Strain</li> <li>G1250 E. coli Host Strain</li> <li>Control Phage Solution</li> </ul>	<ul style="list-style-type: none"> <li>Liquid.</li> <li>Liquid.</li> <li>Liquid.</li> <li>Liquid.</li> <li>Liquid.</li> <li>Liquid.</li> </ul>
<b>Color</b>	:	<ul style="list-style-type: none"> <li>Transpack Blue Tube</li> <li>Transpack Red Tube</li> <li>Big Blue Control Genomic DNA</li> <li>SCS-8 E. coli Strain</li> <li>G1250 E. coli Host Strain</li> <li>Control Phage Solution</li> </ul>	<ul style="list-style-type: none"> <li>Not available.</li> <li>Not available.</li> <li>Not available.</li> <li>Not available.</li> <li>Not available.</li> <li>Not available.</li> </ul>
<b>Odor</b>	:	<ul style="list-style-type: none"> <li>Transpack Blue Tube</li> <li>Transpack Red Tube</li> <li>Big Blue Control Genomic DNA</li> <li>SCS-8 E. coli Strain</li> <li>G1250 E. coli Host Strain</li> <li>Control Phage Solution</li> </ul>	<ul style="list-style-type: none"> <li>Not available.</li> <li>Not available.</li> <li>Not available.</li> <li>Not available.</li> <li>Not available.</li> <li>Not available.</li> </ul>
<b>Odor threshold</b>	:	<ul style="list-style-type: none"> <li>Transpack Blue Tube</li> <li>Transpack Red Tube</li> <li>Big Blue Control Genomic DNA</li> <li>SCS-8 E. coli Strain</li> <li>G1250 E. coli Host Strain</li> <li>Control Phage Solution</li> </ul>	<ul style="list-style-type: none"> <li>Not available.</li> <li>Not available.</li> <li>Not available.</li> <li>Not available.</li> <li>Not available.</li> <li>Not available.</li> </ul>
<b>pH</b>	:	<ul style="list-style-type: none"> <li>Transpack Blue Tube</li> <li>Transpack Red Tube</li> <li>Big Blue Control Genomic DNA</li> <li>SCS-8 E. coli Strain</li> <li>G1250 E. coli Host Strain</li> <li>Control Phage Solution</li> </ul>	<ul style="list-style-type: none"> <li>8</li> <li>Not available.</li> <li>7.5</li> <li>7</li> <li>7</li> <li>7.5</li> </ul>
<b>Melting point</b>	:	<ul style="list-style-type: none"> <li>Transpack Blue Tube</li> <li>Transpack Red Tube</li> <li>Big Blue Control Genomic DNA</li> <li>SCS-8 E. coli Strain</li> <li>G1250 E. coli Host Strain</li> <li>Control Phage Solution</li> </ul>	<ul style="list-style-type: none"> <li>Not available.</li> <li>Not available.</li> <li>0°C (32°F)</li> <li>Not available.</li> <li>Not available.</li> <li>Not available.</li> </ul>
<b>Boiling point</b>	:	<ul style="list-style-type: none"> <li>Transpack Blue Tube</li> <li>Transpack Red Tube</li> <li>Big Blue Control Genomic DNA</li> <li>SCS-8 E. coli Strain</li> <li>G1250 E. coli Host Strain</li> <li>Control Phage Solution</li> </ul>	<ul style="list-style-type: none"> <li>Not available.</li> <li>Not available.</li> <li>100°C (212°F)</li> <li>Not available.</li> <li>Not available.</li> <li>Not available.</li> </ul>

## Section 9. Physical and chemical properties

<b>Flash point</b>	: Transpack Blue Tube Transpack Red Tube Big Blue Control Genomic DNA SCS-8 E. coli Strain G1250 E. coli Host Strain Control Phage Solution	Not available. Not available. Not available. Not available. Not available. Not available.
<b>Evaporation rate</b>	: Transpack Blue Tube Transpack Red Tube Big Blue Control Genomic DNA SCS-8 E. coli Strain G1250 E. coli Host Strain Control Phage Solution	Not available. Not available. Not available. Not available. Not available. Not available.
<b>Flammability (solid, gas)</b>	: Transpack Blue Tube Transpack Red Tube Big Blue Control Genomic DNA SCS-8 E. coli Strain G1250 E. coli Host Strain Control Phage Solution	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.
<b>Lower and upper explosive (flammable) limits</b>	: Transpack Blue Tube Transpack Red Tube Big Blue Control Genomic DNA SCS-8 E. coli Strain G1250 E. coli Host Strain Control Phage Solution	Not available. Not available. Not available. Not available. Not available. Not available.
<b>Vapor pressure</b>	: Transpack Blue Tube Transpack Red Tube Big Blue Control Genomic DNA SCS-8 E. coli Strain G1250 E. coli Host Strain Control Phage Solution	Not available. Not available. Not available. Not available. Not available. Not available.
<b>Vapor density</b>	: Transpack Blue Tube Transpack Red Tube Big Blue Control Genomic DNA SCS-8 E. coli Strain G1250 E. coli Host Strain Control Phage Solution	Not available. Not available. Not available. Not available. Not available. Not available.
<b>Relative density</b>	: Transpack Blue Tube Transpack Red Tube Big Blue Control Genomic DNA SCS-8 E. coli Strain G1250 E. coli Host Strain Control Phage Solution	Not available. Not available. Not available. Not available. Not available. Not available.
<b>Solubility</b>	: Transpack Blue Tube  Transpack Red Tube  Big Blue Control Genomic DNA  SCS-8 E. coli Strain  G1250 E. coli Host Strain  Control Phage Solution	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.

## Section 9. Physical and chemical properties

<b>Partition coefficient: n-octanol/water</b>	:	Transpack Blue Tube	Not available.
		Transpack Red Tube	Not available.
		Big Blue Control Genomic DNA	Not available.
		SCS-8 E. coli Strain	Not available.
		G1250 E. coli Host Strain	Not available.
		Control Phage Solution	Not available.
<b>Auto-ignition temperature</b>	:	Transpack Blue Tube	Not available.
		Transpack Red Tube	Not available.
		Big Blue Control Genomic DNA	Not available.
		SCS-8 E. coli Strain	Not available.
		G1250 E. coli Host Strain	Not available.
		Control Phage Solution	Not available.
<b>Decomposition temperature</b>	:	Transpack Blue Tube	Not available.
		Transpack Red Tube	Not available.
		Big Blue Control Genomic DNA	Not available.
		SCS-8 E. coli Strain	Not available.
		G1250 E. coli Host Strain	Not available.
		Control Phage Solution	Not available.
<b>Viscosity</b>	:	Transpack Blue Tube	Not available.
		Transpack Red Tube	Not available.
		Big Blue Control Genomic DNA	Not available.
		SCS-8 E. coli Strain	Not available.
		G1250 E. coli Host Strain	Not available.
		Control Phage Solution	Not available.

## Section 10. Stability and reactivity

<b>10.1 Reactivity</b>	:	Transpack Blue Tube	No specific test data related to reactivity available for this product or its ingredients.
		Transpack Red Tube	No specific test data related to reactivity available for this product or its ingredients.
		Big Blue Control Genomic DNA	No specific test data related to reactivity available for this product or its ingredients.
		SCS-8 E. coli Strain	No specific test data related to reactivity available for this product or its ingredients.
		G1250 E. coli Host Strain	No specific test data related to reactivity available for this product or its ingredients.
		Control Phage Solution	No specific test data related to reactivity available for this product or its ingredients.
<b>10.2 Chemical stability</b>	:	Transpack Blue Tube	The product is stable.
		Transpack Red Tube	The product is stable.
		Big Blue Control Genomic DNA	The product is stable.
		SCS-8 E. coli Strain	The product is stable.
		G1250 E. coli Host Strain	The product is stable.
		Control Phage Solution	The product is stable.
<b>10.3 Possibility of hazardous reactions</b>	:	Transpack Blue Tube	Under normal conditions of storage and use, hazardous reactions will not occur.
		Transpack Red Tube	Under normal conditions of storage and use, hazardous reactions will not occur.
		Big Blue Control Genomic DNA	Under normal conditions of storage and use, hazardous reactions will not occur.
		SCS-8 E. coli Strain	Under normal conditions of storage and use, hazardous reactions will not occur.
		G1250 E. coli Host Strain	Under normal conditions of storage and use, hazardous reactions will not occur.
			Under normal conditions of storage and use, hazardous reactions will not occur.

## Section 10. Stability and reactivity

	Control Phage Solution	Under normal conditions of storage and use, hazardous reactions will not occur.
<b>10.4 Conditions to avoid</b>	<ul style="list-style-type: none"> <li>: Transpack Blue Tube</li> <li>Transpack Red Tube</li> <li>Big Blue Control Genomic DNA</li> <li>SCS-8 E. coli Strain</li> <li>G1250 E. coli Host Strain</li> <li>Control Phage Solution</li> </ul>	<ul style="list-style-type: none"> <li>No specific data.</li> <li>No specific data.</li> <li>No specific data.</li> <li>No specific data.</li> <li>No specific data.</li> <li>No specific data.</li> </ul>
<b>10.5 Incompatible materials</b>	<ul style="list-style-type: none"> <li>: Transpack Blue Tube</li> <li>Transpack Red Tube</li> <li>Big Blue Control Genomic DNA</li> <li>SCS-8 E. coli Strain</li> <li>G1250 E. coli Host Strain</li> <li>Control Phage Solution</li> </ul>	<ul style="list-style-type: none"> <li>May react or be incompatible with oxidizing materials.</li> <li>May react or be incompatible with oxidizing materials.</li> <li>May react or be incompatible with oxidizing materials.</li> <li>May react or be incompatible with oxidizing materials.</li> <li>May react or be incompatible with oxidizing materials.</li> <li>May react or be incompatible with oxidizing materials.</li> </ul>
<b>10.6 Hazardous decomposition products</b>	<ul style="list-style-type: none"> <li>: Transpack Blue Tube</li> <li>Transpack Red Tube</li> <li>Big Blue Control Genomic DNA</li> <li>SCS-8 E. coli Strain</li> <li>G1250 E. coli Host Strain</li> <li>Control Phage Solution</li> </ul>	<ul style="list-style-type: none"> <li>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</li> <li>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</li> <li>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</li> <li>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</li> <li>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</li> <li>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</li> </ul>

## Section 11. Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
<b>SCS-8 E. coli Strain</b>				
Glycerol	LD50 Oral	Rat	12600 mg/kg	-
Sodium chloride	LD50 Oral	Rat	3000 mg/kg	-
<b>G1250 E. coli Host Strain</b>				
Glycerol	LD50 Oral	Rat	12600 mg/kg	-
Sodium chloride	LD50 Oral	Rat	3000 mg/kg	-

#### Irritation/Corrosion



## Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation	
<b>SCS-8 E. coli Strain</b> Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-	
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-	
	Sodium chloride	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
		Eyes - Moderate irritant Skin - Mild irritant	Rabbit Rabbit	- -	10 milligrams 24 hours 500 milligrams	- -
<b>G1250 E. coli Host Strain</b> Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-	
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-	
	Sodium chloride	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
		Eyes - Moderate irritant Skin - Mild irritant	Rabbit Rabbit	- -	10 milligrams 24 hours 500 milligrams	- -

### Sensitization

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)

Name	Category	Route of exposure	Target organs
<b>G1250 E. coli Host Strain</b> G1250 E. coli Host Strain	Category 2	Inhalation	kidneys

### Aspiration hazard

Not available.

### **Information on the likely routes of exposure**

Transpack Blue Tube	Not available.
Transpack Red Tube	Not available.
Big Blue Control Genomic DNA	Not available.
SCS-8 E. coli Strain	Routes of entry anticipated: Oral, Dermal, Inhalation.
G1250 E. coli Host Strain	Routes of entry anticipated: Oral, Dermal, Inhalation.
Control Phage Solution	Not available.

## Section 11. Toxicological information

### Potential acute health effects

<b>Eye contact</b>	: Transpack Blue Tube Transpack Red Tube Big Blue Control Genomic DNA SCS-8 E. coli Strain G1250 E. coli Host Strain Control Phage Solution	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. Causes serious eye irritation. Causes serious eye irritation. No known significant effects or critical hazards.
<b>Inhalation</b>	: Transpack Blue Tube Transpack Red Tube Big Blue Control Genomic DNA SCS-8 E. coli Strain G1250 E. coli Host Strain Control Phage Solution	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>	: Transpack Blue Tube Transpack Red Tube Big Blue Control Genomic DNA SCS-8 E. coli Strain G1250 E. coli Host Strain Control Phage Solution	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>	: Transpack Blue Tube Transpack Red Tube Big Blue Control Genomic DNA SCS-8 E. coli Strain G1250 E. coli Host Strain Control Phage Solution	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.

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

<b>Eye contact</b>	: Transpack Blue Tube Transpack Red Tube Big Blue Control Genomic DNA SCS-8 E. coli Strain  G1250 E. coli Host Strain  Control Phage Solution	No specific data. No specific data. No specific data. Adverse symptoms may include the following: pain or irritation watering redness Adverse symptoms may include the following: pain or irritation watering redness No specific data.
<b>Inhalation</b>	: Transpack Blue Tube Transpack Red Tube Big Blue Control Genomic DNA SCS-8 E. coli Strain G1250 E. coli Host Strain Control Phage Solution	No specific data. No specific data. No specific data. No specific data. No specific data. No specific data.
<b>Skin contact</b>	: Transpack Blue Tube Transpack Red Tube Big Blue Control Genomic DNA SCS-8 E. coli Strain G1250 E. coli Host Strain Control Phage Solution	No specific data. No specific data. No specific data. No specific data. No specific data. No specific data.
<b>Ingestion</b>	: Transpack Blue Tube Transpack Red Tube Big Blue Control Genomic DNA SCS-8 E. coli Strain G1250 E. coli Host Strain Control Phage Solution	No specific data. No specific data. No specific data. No specific data. No specific data. No specific data.

## Section 11. Toxicological information

### 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>	: Transpack Blue Tube Transpack Red Tube Big Blue Control Genomic DNA SCS-8 E. coli Strain G1250 E. coli Host Strain  Control Phage Solution	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. May cause damage to organs through prolonged or repeated exposure if inhaled. No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: Transpack Blue Tube Transpack Red Tube Big Blue Control Genomic DNA SCS-8 E. coli Strain G1250 E. coli Host Strain Control Phage Solution	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>	: Transpack Blue Tube Transpack Red Tube Big Blue Control Genomic DNA SCS-8 E. coli Strain G1250 E. coli Host Strain Control Phage Solution	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>Teratogenicity</b>	: Transpack Blue Tube Transpack Red Tube Big Blue Control Genomic DNA SCS-8 E. coli Strain G1250 E. coli Host Strain Control Phage Solution	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>Developmental effects</b>	: Transpack Blue Tube Transpack Red Tube Big Blue Control Genomic DNA SCS-8 E. coli Strain G1250 E. coli Host Strain Control Phage Solution	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>Fertility effects</b>	: Transpack Blue Tube Transpack Red Tube Big Blue Control Genomic DNA SCS-8 E. coli Strain G1250 E. coli Host Strain Control Phage Solution	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

## Section 11. Toxicological information

Route	ATE value
<b>SCS-8 E. coli Strain</b> Oral	300000 mg/kg
<b>G1250 E. coli Host Strain</b> Oral	300000 mg/kg

## Section 12. Ecological information

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
<b>SCS-8 E. coli Strain</b> Glycerol Sodium chloride	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
	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 EC50 402600 µg/l Fresh water	Daphnia - Daphnia magna	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
	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
<b>G1250 E. coli Host Strain</b> Glycerol Sodium chloride	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
	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 EC50 402600 µg/l Fresh water	Daphnia - Daphnia magna	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
	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

Product/ingredient name	Test	Result	Dose	Inoculum
<b>SCS-8 E. coli Strain</b> Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-
<b>G1250 E. coli Host Strain</b> Glycerol	301D Ready Biodegradability - Closed Bottle	93 % - 30 days	-	-

## Section 12. Ecological information

	Test			
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### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<b>SCS-8 E. coli Strain</b> Glycerol	-1.76	-	low
<b>G1250 E. coli Host 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. 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 Annex II of MARPOL and the IBC Code** : Not available.

## Section 15. Regulatory information

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

**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

#### SARA 302/304

##### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

#### SARA 311/312

<b>Classification</b>	:	Transpack Blue Tube Transpack Red Tube Big Blue Control Genomic DNA SCS-8 E. coli Strain G1250 E. coli Host Strain  Control Phage Solution	Not applicable. Not applicable. Not applicable. EYE IRRITATION - Category 2A EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (kidneys) (inhalation) - Category 2 Not applicable.
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##### Composition/information on ingredients

Name	%	Classification
<b>Transpack Blue Tube</b> Sucrose	≤10	COMBUSTIBLE DUSTS
<b>Transpack Red Tube</b> Sucrose	≤10	COMBUSTIBLE DUSTS
<b>SCS-8 E. coli Strain</b> Glycerol	≥10 - ≤25	EYE IRRITATION - Category 2A
Sodium chloride	≤3	EYE IRRITATION - Category 2A
<b>G1250 E. coli Host Strain</b> Glycerol	≥10 - ≤25	EYE IRRITATION - Category 2A
Sodium chloride	≤3	EYE IRRITATION - Category 2A

#### State regulations

**Massachusetts** : The following components are listed: SUCROSE DUST; 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: .ALPHA.-D-GLUCOPYRANOSIDE, .BETA.-D-FRUCTOFURANOSYL; 1,2,3-PROPANETRIOL



## Section 15. Regulatory information

### [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
SCS-8 E. coli Strain Tetracycline	-	-

### [International regulations](#)

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

Not listed.

#### [Montreal Protocol \(Annexes A, B, C, E\)](#)

Not listed.

#### [Stockholm Convention on Persistent Organic Pollutants](#)

Not listed.

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

Not listed.

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

Not listed.

### [Inventory list](#)

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

## Section 16. Other information

### [History](#)

<b>Date of issue</b>	: 05/23/2018
<b>Date of previous issue</b>	: 01/21/2016
<b>Version</b>	: 4

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

## Section 16. Other information

Classification	Justification
<p><b>SCS-8 E. coli Strain</b> EYE IRRITATION - Category 2A</p>	<p>Calculation method</p>
<p><b>G1250 E. coli Host Strain</b> EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (kidneys) (inhalation) - Category 2</p>	<p>Calculation method Expert judgment</p>

✔ 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.**