

# SAFETY DATA SHEET

pDual Expression Vector - 100 micrograms, Part Number 214502

## Section 1. Identification

<b>Product identifier</b>	: pDual Expression Vector - 100 micrograms, Part Number 214502
<b>Part no. (chemical kit)</b>	: 214502
<b>Part no.</b>	: pDual Expression Vector 214502-51 XL1-Blue E. coli Strain 200268-81
<b>Material uses</b>	: Analytical reagent.  pDual Expression Vector 0.1 ml (100 µg 1 µg/µl) XL1-Blue E. coli Strain 0.5 ml
<b>Supplier/Manufacturer</b>	: Agilent Technologies, Inc. 5301 Stevens Creek Blvd Santa Clara, CA 95051, USA 800-227-9770
<b>Emergency telephone number (with hours of operation)</b>	: CHEMTREC®: 1-800-424-9300

## Section 2. Hazard identification

Classification of the substance or mixture

**XL1-Blue E. coli Strain**  
H319 EYE IRRITATION - Category 2A

GHS label elements

**Hazard pictograms** : XL1-Blue E. coli Strain



**Signal word** : pDual Expression Vector XL1-Blue E. coli Strain No signal word.  
Warning

**Hazard statements** : pDual Expression Vector XL1-Blue E. coli Strain No known significant effects or critical hazards.  
H319 - Causes serious eye irritation.

Precautionary statements

**Prevention** : pDual Expression Vector XL1-Blue E. coli Strain Not applicable.  
P280 - Wear eye or face protection.

**Response** : pDual Expression Vector XL1-Blue E. coli Strain Not applicable.  
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.

**Storage** : pDual Expression Vector XL1-Blue E. coli Strain Not applicable.  
Not applicable.

**Disposal** : pDual Expression Vector XL1-Blue E. coli Strain Not applicable.  
Not applicable.

**Supplemental label elements** : pDual Expression Vector XL1-Blue E. coli Strain None known.  
None known.

**Other hazards which do not result in classification** : pDual Expression Vector XL1-Blue E. coli Strain None known.  
None known.

### Section 3. Composition/information on ingredients

**Substance/mixture** : pDual Expression Vector Mixture  
XL1-Blue E. coli Strain Mixture

Ingredient name	% (w/w)	CAS number
<input checked="" type="checkbox"/> XL1-Blue E. coli Strain		
Glycerol	10 - 30	56-81-5
Sodium chloride	0.1 - 1	7647-14-5

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

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

### Section 4. First-aid measures

#### Description of necessary first aid measures

<b>Eye contact</b>	: pDual Expression Vector	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	XL1-Blue 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.
<b>Inhalation</b>	: pDual Expression Vector	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	XL1-Blue 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.
<b>Skin contact</b>	: pDual Expression Vector	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	XL1-Blue 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.
<b>Ingestion</b>	: pDual Expression Vector	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	XL1-Blue 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

## Section 4. First-aid measures

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.

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

#### Potential acute health effects

<b>Eye contact</b>	: pDual Expression Vector XL1-Blue E. coli Strain	No known significant effects or critical hazards. Causes serious eye irritation.
<b>Inhalation</b>	: pDual Expression Vector XL1-Blue E. coli Strain	No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Skin contact</b>	: pDual Expression Vector XL1-Blue E. coli Strain	No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Ingestion</b>	: pDual Expression Vector XL1-Blue E. coli Strain	No known significant effects or critical hazards. No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

<b>Eye contact</b>	: pDual Expression Vector XL1-Blue E. coli Strain	No specific data. Adverse symptoms may include the following: pain or irritation watering redness
<b>Inhalation</b>	: pDual Expression Vector XL1-Blue E. coli Strain	No specific data. No specific data.
<b>Skin contact</b>	: pDual Expression Vector XL1-Blue E. coli Strain	No specific data. No specific data.
<b>Ingestion</b>	: pDual Expression Vector XL1-Blue E. coli Strain	No specific data. No specific data.

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

<b>Notes to physician</b>	: pDual Expression Vector  XL1-Blue E. coli Strain	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>	: pDual Expression Vector XL1-Blue E. coli Strain	No specific treatment. No specific treatment.
<b>Protection of first-aiders</b>	: pDual Expression Vector  XL1-Blue E. coli Strain	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.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

<b>Suitable extinguishing media</b>	: pDual Expression Vector  XL1-Blue E. coli Strain	Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	: pDual Expression Vector XL1-Blue E. coli Strain	None known. None known.
<b>Specific hazards arising from the chemical</b>	: pDual Expression Vector  XL1-Blue E. coli Strain	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.

## Section 5. Fire-fighting measures

<b>Hazardous thermal decomposition products</b>	: pDual Expression Vector XL1-Blue E. coli Strain	No specific data. Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds metal oxide/oxides
<b>Special protective actions for fire-fighters</b>	: pDual Expression Vector  XL1-Blue 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.  Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
<b>Special protective equipment for fire-fighters</b>	: pDual Expression Vector  XL1-Blue 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.  Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

<b>For non-emergency personnel</b>	: pDual Expression Vector  XL1-Blue 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. Put on appropriate personal protective equipment.  No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
<b>For emergency responders</b>	: pDual Expression Vector  XL1-Blue 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".  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>Environmental precautions</b>	: pDual Expression Vector  XL1-Blue 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).  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).

### Methods and materials for containment and cleaning up

## Section 6. Accidental release measures

<b>Methods for cleaning up</b>	: pDual Expression Vector	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
	XL1-Blue 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.

## Section 7. Handling and storage

### Precautions for safe handling

<b>Protective measures</b>	: pDual Expression Vector	Put on appropriate personal protective equipment (see Section 8).
	XL1-Blue 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.
<b>Advice on general occupational hygiene</b>	: pDual Expression Vector	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	XL1-Blue 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.
<b>Conditions for safe storage, including any incompatibilities</b>	: pDual Expression Vector	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
	XL1-Blue 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.

## Section 8. Exposure controls/personal protection

### Control parameters

### Occupational exposure limits

Ingredient name	Exposure limits
<input checked="" type="checkbox"/> L1-Blue E. coli Strain Glycerol	<p><b>CA Alberta Provincial (Canada, 6/2018).</b> 8 hrs OEL: 10 mg/m<sup>3</sup> 8 hours. Form: Mist</p> <p><b>CA Quebec Provincial (Canada, 7/2019).</b> TWAEV: 10 mg/m<sup>3</sup> 8 hours. Form: mist</p> <p><b>CA Saskatchewan Provincial (Canada, 7/2013).</b> STEL: 20 mg/m<sup>3</sup> 15 minutes. Form: mist TWA: 10 mg/m<sup>3</sup> 8 hours. Form: mist</p> <p><b>CA British Columbia Provincial (Canada, 1/2020).</b> TWA: 3 mg/m<sup>3</sup> 8 hours. Form: respirable mist TWA: 10 mg/m<sup>3</sup> 8 hours. Form: total mist</p>

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

## Section 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	: pDual Expression Vector XL1-Blue E. coli Strain	Liquid. Liquid.
<b>Color</b>	: pDual Expression Vector XL1-Blue E. coli Strain	Not available. Not available.
<b>Odor</b>	: pDual Expression Vector XL1-Blue E. coli Strain	Not available. Not available.
<b>Odor threshold</b>	: pDual Expression Vector XL1-Blue E. coli Strain	Not available. Not available.
<b>pH</b>	: pDual Expression Vector XL1-Blue E. coli Strain	7.5 7.5
<b>Melting point</b>	: pDual Expression Vector XL1-Blue E. coli Strain	0°C (32°F) Not available.
<b>Boiling point</b>	: pDual Expression Vector XL1-Blue E. coli Strain	100°C (212°F) Not available.
<b>Flash point</b>	: pDual Expression Vector XL1-Blue E. coli Strain	Not available. Not available.
<b>Evaporation rate</b>	: pDual Expression Vector XL1-Blue E. coli Strain	Not available. Not available.
<b>Flammability (solid, gas)</b>	: pDual Expression Vector XL1-Blue E. coli Strain	Not applicable. Not applicable.
<b>Lower and upper explosive (flammable) limits</b>	: pDual Expression Vector XL1-Blue E. coli Strain	Not available. Not available.
<b>Vapor pressure</b>	: pDual Expression Vector XL1-Blue E. coli Strain	Not available. Not available.
<b>Vapor density</b>	: pDual Expression Vector XL1-Blue E. coli Strain	Not available. Not available.
<b>Relative density</b>	: pDual Expression Vector XL1-Blue E. coli Strain	Not available. Not available.
<b>Solubility</b>	: pDual Expression Vector  XL1-Blue E. coli Strain	Easily soluble in the following materials: cold water and hot water. Soluble in the following materials: cold water and hot water.
<b>Partition coefficient: n-octanol/water</b>	: pDual Expression Vector XL1-Blue E. coli Strain	Not available. Not available.
<b>Auto-ignition temperature</b>	: pDual Expression Vector XL1-Blue E. coli Strain	Not available. Not available.
<b>Decomposition temperature</b>	: pDual Expression Vector XL1-Blue E. coli Strain	Not available. Not available.
<b>Viscosity</b>	: pDual Expression Vector XL1-Blue E. coli Strain	Not available. Not available.

## Section 10. Stability and reactivity

<b>Reactivity</b>	: pDual Expression Vector  XL1-Blue E. coli Strain	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.
<b>Chemical stability</b>	: pDual Expression Vector XL1-Blue E. coli Strain	The product is stable. The product is stable.
<b>Possibility of hazardous reactions</b>	: pDual Expression Vector  XL1-Blue E. coli 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.
<b>Conditions to avoid</b>	: pDual Expression Vector XL1-Blue E. coli Strain	No specific data. No specific data.

## Section 10. Stability and reactivity

**Incompatible materials** : pDual Expression Vector  
XL1-Blue E. coli Strain May react or be incompatible with oxidizing materials.  
May react or be incompatible with oxidizing materials.

**Hazardous decomposition products** : pDual Expression Vector  
XL1-Blue E. coli Strain Under normal conditions of storage and use, hazardous decomposition products should not be produced.  
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
XL1-Blue E. coli Strain				
Glycerol	LD50 Oral	Rat	12600 mg/kg	-
Sodium chloride	LD50 Oral	Rat	3000 mg/kg	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
XL1-Blue E. coli Strain					
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	Rabbit	-	10 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-

#### 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)

Not available.

#### Aspiration hazard

Not available.

**Information on the likely routes of exposure** : pDual Expression Vector  
XL1-Blue E. coli Strain Not available.  
Routes of entry anticipated: Oral, Dermal, Inhalation.

#### Potential acute health effects

**Eye contact** : pDual Expression Vector  
XL1-Blue E. coli Strain No known significant effects or critical hazards.  
Causes serious eye irritation.

## Section 11. Toxicological information

<b>Inhalation</b>	: pDual Expression Vector XL1-Blue E. coli Strain	No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Skin contact</b>	: pDual Expression Vector XL1-Blue E. coli Strain	No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Ingestion</b>	: pDual Expression Vector XL1-Blue E. coli Strain	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>	: pDual Expression Vector XL1-Blue E. coli Strain	No specific data. Adverse symptoms may include the following: pain or irritation watering redness
<b>Inhalation</b>	: pDual Expression Vector XL1-Blue E. coli Strain	No specific data. No specific data.
<b>Skin contact</b>	: pDual Expression Vector XL1-Blue E. coli Strain	No specific data. No specific data.
<b>Ingestion</b>	: pDual Expression Vector XL1-Blue E. coli Strain	No specific data. No specific data.

### 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>	: pDual Expression Vector XL1-Blue E. coli Strain	No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: pDual Expression Vector XL1-Blue E. coli Strain	No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Mutagenicity</b>	: pDual Expression Vector XL1-Blue E. coli Strain	No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Reproductive toxicity</b>	: pDual Expression Vector XL1-Blue E. coli Strain	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 E. coli Strain</b>					
XL1-Blue E. coli Strain	300000	N/A	N/A	N/A	N/A
Glycerol	12600	N/A	N/A	N/A	N/A
Sodium chloride	3000	N/A	N/A	N/A	N/A

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
<b>XL1-Blue 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 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	

### Persistence and degradability

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

### Bioaccumulative potential

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

### Mobility in soil

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

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

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or 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.

## Section 14. Transport information

**TDG / 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

### Canadian lists

**Canadian NPRI** : None of the components are listed.

**CEPA Toxic substances** : None of the components are listed.

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

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

Not listed.

### Inventory list

**Australia** :  Not determined.

**Canada** :  Not determined.

**China** :  All components are listed or exempted.

**Europe** :  All components are listed or exempted.

**Japan** : **Japan inventory (ENCS):** All components are listed or exempted.  
**Japan inventory (ISHL):** All components are listed or exempted.

**New Zealand** :  All components are listed or exempted.

**Philippines** :  Not determined.

**Republic of Korea** :  All components are listed or exempted.

**Taiwan** :  All components are listed or exempted.

**Thailand** :  Not determined.

**Turkey** :  Not determined.

**United States** :  All components are active or exempted.

**Viet Nam** :  Not determined.

## Section 16. Other information

### History

**Date of issue/Date of revision** : 03/22/2021

**Date of previous issue** : 09/25/2018

**Version** : 6

## Section 16. Other information

**Key to abbreviations** :

- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- HPR = Hazardous Products Regulations
- 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
<b>XL1-Blue E. coli Strain</b> EYE IRRITATION - Category 2A	Calculation method

**References** : Not available.

📌 Indicates information that has changed from previously issued version.

### Notice to reader

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