

SAFETY DATA SHEET

pBluescript II KS(+) Phagemid, Part Number 212207

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

1.1 Product identifier

Product name : pBluescript II KS(+) Phagemid, Part Number 212207
Part no. (chemical kit) : 212207
Part no. : XL1-Blue MRF' E.coli Strain 200301-81
pBluescript II KS (+) Phagemid 212207-51

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

Identified uses : Analytical reagent.
XL1-Blue MRF' E.coli Strain 0.5 ml
pBluescript II KS (+) Phagemid 0.02 ml (20 µg 1 µg/µl)
Uses advised against : None known.

1.3 Details of the supplier of the safety data sheet

Agilent Technologies Deutschland GmbH
Hewlett-Packard-Str. 8
76337 Waldbronn
Germany
0800 603 1000
e-mail address of person responsible for this SDS : pdl-msds_author@agilent.com

1.4 Emergency telephone number

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

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : XL1-Blue MRF' E.coli Strain Mixture
pBluescript II KS (+) Phagemid Mixture

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

Not classified.

XL1-Blue MRF' E.coli Strain The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

pBluescript II KS (+) Phagemid The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Ingredients of unknown toxicity : XL1-Blue MRF' E.coli Strain Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 10 - 30%

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

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

2.2 Label elements

SECTION 2: Hazards identification

Signal word	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	No signal word. No signal word.
Hazard statements	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	No known significant effects or critical hazards. No known significant effects or critical hazards.

Precautionary statements

Prevention	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	Not applicable. Not applicable.
Response	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	Not applicable. Not applicable.
Storage	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	Not applicable. Not applicable.
Disposal	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	Not applicable. Not applicable.
Supplemental label elements	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	Not applicable. Not applicable.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	Not applicable. Not applicable.

Special packaging requirements

Tactile warning of danger	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	Not applicable. Not applicable.
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2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	This mixture does not contain any substances that are assessed to be a PBT or a vPvB. This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
Other hazards which do not result in classification	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	None known. None known.

SECTION 3: Composition/information on ingredients

3.1 Substances : XL1-Blue MRF' E.coli Strain Mixture
pBluescript II KS (+) Phagemid Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
XL1-Blue MRF' E.coli Strain glycerol	REACH #: Annex V EC: 200-289-5 CAS: 56-81-5	≥10 - ≤25	Not classified. See Section 16 for the full text of the H statements declared above.	-	[1]

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

Type

XL1-Blue MRF' E.coli Strain [1] Substance with a workplace exposure limit

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

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	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. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	Wash out mouth with water. 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. Wash out mouth with water. 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.
Protection of first-aiders	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	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.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

SECTION 4: First aid measures

Eye contact	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	No known significant effects or critical hazards. No known significant effects or critical hazards.
Inhalation	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	No known significant effects or critical hazards. No known significant effects or critical hazards.
Skin contact	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	No known significant effects or critical hazards. No known significant effects or critical hazards.
Ingestion	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	No known significant effects or critical hazards. No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	No specific data. No specific data.
Inhalation	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	No specific data. No specific data.
Skin contact	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	No specific data. No specific data.
Ingestion	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	No specific data. No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	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.
Specific treatments	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	No specific treatment. No specific treatment.

SECTION 5: Firefighting measures**5.1 Extinguishing media**

Suitable extinguishing media	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	None known. None known.

5.2 Special hazards arising from the substance or mixture

SECTION 5: Firefighting measures

Hazards from the substance or mixture	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	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.
Hazardous combustion products	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds metal oxide/oxides No specific data.

5.3 Advice for firefighters

Special precautions for fire-fighters	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	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.
Special protective equipment for fire-fighters	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

For non-emergency personnel	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
For emergency responders	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
6.2 Environmental precautions	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution

SECTION 6: Accidental release measures

(sewers, waterways, soil or air).

6.3 Methods and material for containment and cleaning up

Methods for cleaning up	XL1-Blue MRF' E.coli Strain	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
	pBluescript II KS (+) Phagemid	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

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

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures	XL1-Blue MRF' E.coli Strain	Put on appropriate personal protective equipment (see Section 8).
	pBluescript II KS (+) Phagemid	Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	XL1-Blue MRF' E.coli Strain	Potentially biohazardous material. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	pBluescript II KS (+) Phagemid	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

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

SECTION 7: Handling and storage**7.3 Specific end use(s)**

Recommendations	: XL1-Blue MRF' E.coli Strain	Industrial applications, Professional applications.
	pBluescript II KS (+) Phagemid	Industrial applications, Professional applications.
Industrial sector specific solutions	: XL1-Blue MRF' E.coli Strain	Not available.
	pBluescript II KS (+) Phagemid	Not available.

SECTION 8: Exposure controls/personal protection**8.1 Control parameters****Occupational exposure limits**

Product/ingredient name	Exposure limit values
XL1-Blue MRF' E.coli Strain Glycerol	NAOSH (Ireland, 5/2021). Notes: Advisory Occupational Exposure Limit Values (OELVs) OELV-8hr: 10 mg/m ³ 8 hours. Form: mist

Biological exposure indices

No exposure indices known.

Recommended monitoring procedures

: Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

No DNELs/DMELs available.

PNECs

No PNECs available

8.2 Exposure controls

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

Individual protection measures

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

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

Skin protection

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

SECTION 8: Exposure controls/personal protection

Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

Physical state	: XL1-Blue MRF' E.coli Strain	Liquid.																			
	pBluescript II KS (+) Phagemid	Liquid.																			
Colour	: XL1-Blue MRF' E.coli Strain	Not available.																			
	pBluescript II KS (+) Phagemid	Not available.																			
Odour	: XL1-Blue MRF' E.coli Strain	Not available.																			
	pBluescript II KS (+) Phagemid	Not available.																			
Odour threshold	: XL1-Blue MRF' E.coli Strain	Not available.																			
	pBluescript II KS (+) Phagemid	Not available.																			
Melting point/freezing point	: XL1-Blue MRF' E.coli Strain	Not available.																			
	pBluescript II KS (+) Phagemid	0°C																			
Initial boiling point and boiling range	: XL1-Blue MRF' E.coli Strain	Not available.																			
	pBluescript II KS (+) Phagemid	100°C																			
Flammability	: XL1-Blue MRF' E.coli Strain	Not applicable.																			
	pBluescript II KS (+) Phagemid	Not applicable.																			
Upper/lower flammability or explosive limits	: XL1-Blue MRF' E.coli Strain	Not available.																			
	pBluescript II KS (+) Phagemid	Not available.																			
Flash point	:	<table><tr><th colspan="2">Closed cup</th><th colspan="2">Open cup</th></tr><tr><th>Ingredient name</th><th>°C</th><th>Method</th><th>°C</th><th>Method</th></tr><tr><td>XL1-Blue MRF' E.coli Strain</td><td></td><td></td><td></td><td></td></tr><tr><td>glycerol</td><td>-</td><td>-</td><td>177</td><td>-</td></tr></table>	Closed cup		Open cup		Ingredient name	°C	Method	°C	Method	XL1-Blue MRF' E.coli Strain					glycerol	-	-	177	-
Closed cup		Open cup																			
Ingredient name	°C	Method	°C	Method																	
XL1-Blue MRF' E.coli Strain																					
glycerol	-	-	177	-																	

SECTION 9: Physical and chemical properties

Auto-ignition temperature	:	Ingredient name		°C	Method				
		XL1-Blue MRF' E.coli Strain glycerol		370	-				
Decomposition temperature	:	XL1-Blue MRF' E.coli Strain	Not available.						
		pBluescript II KS (+) Phagemid	Not available.						
pH	:	XL1-Blue MRF' E.coli Strain	7						
		pBluescript II KS (+) Phagemid	7.5						
Viscosity	:	XL1-Blue MRF' E.coli Strain	Not available.						
		pBluescript II KS (+) Phagemid	Not available.						
Solubility(ies)	:	Media			Result				
		XL1-Blue MRF' E.coli Strain water			Soluble				
		pBluescript II KS (+) Phagemid water			Soluble				
Partition coefficient: n-octanol/water	:	XL1-Blue MRF' E.coli Strain	Not applicable.						
		pBluescript II KS (+) Phagemid	Not applicable.						
Vapour pressure	:	Ingredient name		Vapour Pressure at 20°C		Vapour pressure at 50°C			
				mm Hg	kPa	Method	mm Hg	kPa	Method
		XL1-Blue MRF' E.coli Strain							
		water		17.5	2.3	-	92.258	12.3	-
		glycerol		0.000075	0.00001	-	0.0025	0.00033	-
		pBluescript II KS (+) Phagemid							
		water		17.5	2.3	-	92.258	12.3	-
Evaporation rate	:	XL1-Blue MRF' E.coli Strain	Not available.						
		pBluescript II KS (+) Phagemid	Not available.						
Relative density	:	XL1-Blue MRF' E.coli Strain	Not available.						
		pBluescript II KS (+) Phagemid	Not available.						
Vapour density	:	XL1-Blue MRF' E.coli Strain	Not available.						
		pBluescript II KS (+) Phagemid	Not available.						
Explosive properties	:	XL1-Blue MRF' E.coli Strain	Not available.						
		pBluescript II KS (+) Phagemid	Not available.						

SECTION 9: Physical and chemical properties

Oxidising properties	: XL1-Blue MRF' E.coli Strain	Not available.
	pBluescript II KS (+) Phagemid	Not available.

Particle characteristics

Median particle size	: XL1-Blue MRF' E.coli Strain	Not applicable.
	pBluescript II KS (+) Phagemid	Not applicable.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	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.
10.2 Chemical stability	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	The product is stable. The product is stable.
10.3 Possibility of hazardous reactions	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	No specific data. No specific data.
10.5 Incompatible materials	: XL1-Blue MRF' E.coli Strain pBluescript II KS (+) Phagemid	May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials.
10.6 Hazardous decomposition products	: XL1-Blue MRF' Strain pBluescript II KS(+) Phagemid	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**11.1 Information on toxicological effects****Acute toxicity**

Not available.

Acute toxicity estimates

N/A

Irritation/Corrosion**Conclusion/Summary** : Not available.**Sensitiser****Conclusion/Summary** : Not available.**Mutagenicity**

SECTION 11: Toxicological information

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure : XL1-Blue MRF' E.coli Strain Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
pBluescript II KS (+) Not available.
Phagemid

Potential acute health effects

Inhalation : XL1-Blue MRF' E.coli Strain No known significant effects or critical hazards.
pBluescript II KS (+) No known significant effects or critical hazards.
Phagemid

Ingestion : XL1-Blue MRF' E.coli Strain No known significant effects or critical hazards.
pBluescript II KS (+) No known significant effects or critical hazards.
Phagemid

Skin contact : XL1-Blue MRF' E.coli Strain No known significant effects or critical hazards.
pBluescript II KS (+) No known significant effects or critical hazards.
Phagemid

Eye contact : XL1-Blue MRF' E.coli Strain No known significant effects or critical hazards.
pBluescript II KS (+) No known significant effects or critical hazards.
Phagemid

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : XL1-Blue MRF' E.coli Strain No specific data.
pBluescript II KS (+) No specific data.
Phagemid

Ingestion : XL1-Blue MRF' E.coli Strain No specific data.
pBluescript II KS (+) No specific data.
Phagemid

Skin contact : XL1-Blue MRF' E.coli Strain No specific data.
pBluescript II KS (+) No specific data.
Phagemid

Eye contact : XL1-Blue MRF' E.coli Strain No specific data.
pBluescript II KS (+) No specific data.
Phagemid

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

Potential immediate effects : Not available.

SECTION 11: Toxicological information

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Conclusion/Summary : Not available.

General	: XL1-Blue MRF' E.coli Strain	No known significant effects or critical hazards.
	pBluescript II KS (+) Phagemid	No known significant effects or critical hazards.
Carcinogenicity	: XL1-Blue MRF' E.coli Strain	No known significant effects or critical hazards.
	pBluescript II KS (+) Phagemid	No known significant effects or critical hazards.
Mutagenicity	: XL1-Blue MRF' E.coli Strain	No known significant effects or critical hazards.
	pBluescript II KS (+) Phagemid	No known significant effects or critical hazards.
Reproductive toxicity	: XL1-Blue MRF' E.coli Strain	No known significant effects or critical hazards.
	pBluescript II KS (+) Phagemid	No known significant effects or critical hazards.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Not available.

12.3 Bioaccumulative potential

Not available.

12.4 Mobility in soil

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

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

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

12.6 Endocrine disrupting properties

Not available.

SECTION 12: Ecological information

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

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

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

Packaging

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

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

SECTION 14: Transport information

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

Additional information

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

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

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

No listed substance

Label	: XL1-Blue MRF' E.coli Strain	Not applicable.
	pBluescript II KS (+)	Not applicable.
	Phagemid	

Other EU regulations

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia	: All components are listed or exempted.
Canada	: All components are listed or exempted.
China	: All components are listed or exempted.
Eurasian Economic Union	: Russian Federation inventory : All components are listed or exempted.
Japan	: Japan inventory (CSCL) : All components are listed or exempted. Japan inventory (ISHL) : All components are listed or exempted.
New Zealand	: All components are listed or exempted.
Philippines	: All components are listed or exempted.
Republic of Korea	: All components are listed or exempted.
Taiwan	: All components are listed or exempted.
Thailand	: Not determined.
Turkey	: Not determined.

SECTION 15: Regulatory information

United States	: All components are active or exempted.
Viet Nam	: All components are listed or exempted.
15.2 Chemical safety assessment	: This product contains substances for which Chemical Safety Assessments might still be required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms	: ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement PNEC = Predicted No Effect Concentration RRN = REACH Registration Number
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Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Not classified.	

Full text of abbreviated H statements

Not applicable.

Full text of classifications [CLP/GHS]

Not applicable.

Date of issue/ Date of revision	: 27/12/2023
Date of previous issue	: No previous validation
Version	: 1

Notice to reader

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