Conforms to Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals

SAFETY DATA SHEET

Agilent Technologies

PathDetect pFA-CMV Plasmid, Part Number 219036

Section 1. Identification

Product identifier : PathDetect pFA-CMV Plasmid, Part Number 219036

Part no. (chemical kit) : 219036

Part no. : pFA-CMV Vector (Fusion Trans-activator Plasmid) 219036-51
XL1-Blue MRF' E.coli Strain 200301-81

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

Identified uses : Analytical reagent.
pFA-CMV Vector (Fusion Trans-activator Plasmid) 0.01 ml (20 µg 1 µg/µl)
XL1-Blue MRF' E.coli Strain 0.5 ml

Supplier/Manufacturer : Agilent Technologies Australia Pty Ltd
679 Springvale Road
Mulgrave
Victoria 3170, Australia
1800 802 402

Emergency telephone number (with hours of operation) : CHEMTREC®: +(61)-290372994

Section 2. Hazard(s) identification

Classification of the substance or mixture

XL1-Blue MRF' E.coli Strain

H320 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2B

GHS label elements

Signal word : pFA-CMV Vector (Fusion Trans-activator Plasmid) No signal word.
XL1-Blue MRF' E.coli Strain WARNING

Hazard statements : pFA-CMV Vector (Fusion Trans-activator Plasmid) No known significant effects or critical hazards.
XL1-Blue MRF' E.coli Strain H320 - Causes eye irritation.

Precautionary statements

Prevention : pFA-CMV Vector (Fusion Trans-activator Plasmid) Not applicable.
XL1-Blue MRF' E.coli Strain Not applicable.

Response : pFA-CMV Vector (Fusion Trans-activator Plasmid) Not applicable.
XL1-Blue MRF' E.coli Strain P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.

Storage : pFA-CMV Vector (Fusion Trans-activator Plasmid) Not applicable.
XL1-Blue MRF' E.coli Strain Not applicable.

Section 2. Hazard(s) identification

Disposal : pFA-CMV Vector (Fusion Trans-activator Plasmid) — Not applicable.
XL1-Blue MRF' E.coli Strain — Not applicable.

Supplemental label elements

Additional warning phrases : pFA-CMV Vector (Fusion Trans-activator Plasmid) — Not applicable.
XL1-Blue MRF' E.coli Strain — Not applicable.

Other hazards which do not result in classification : pFA-CMV Vector (Fusion Trans-activator Plasmid) — None known.
XL1-Blue MRF' E.coli Strain — None known.

Section 3. Composition and ingredient information

Substance/mixture : pFA-CMV Vector (Fusion Trans-activator Plasmid) — Mixture
XL1-Blue MRF' E.coli Strain — Mixture

CAS number/other identifiers

Ingredient name	% (w/w)	CAS number
XL1-Blue MRF' E.coli Strain		
Glycerol	≥10 - ≤30	56-81-5

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

The total concentration of ingredients in this product, reported or not in this section, is 100%.

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

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : pFA-CMV Vector (Fusion Trans-activator Plasmid) — Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

XL1-Blue MRF' E.coli Strain — Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention.

Inhalation : pFA-CMV Vector (Fusion Trans-activator Plasmid) — Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

XL1-Blue MRF' E.coli Strain — Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Section 4. First aid measures

Skin contact	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
		XL1-Blue MRF' E.coli Strain	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	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.
		XL1-Blue MRF' E.coli Strain	Wash out mouth with water. Remove dentures if any. 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.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	No known significant effects or critical hazards.
		XL1-Blue MRF' E.coli Strain	Causes eye irritation.
Inhalation	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	No known significant effects or critical hazards.
		XL1-Blue MRF' E.coli Strain	No known significant effects or critical hazards.
Skin contact	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	No known significant effects or critical hazards.
		XL1-Blue MRF' E.coli Strain	No known significant effects or critical hazards.
Ingestion	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	No known significant effects or critical hazards.
		XL1-Blue MRF' E.coli Strain	No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	No specific data.
		XL1-Blue MRF' E.coli Strain	Adverse symptoms may include the following: irritation watering redness
Inhalation	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	No specific data.
		XL1-Blue MRF' E.coli Strain	No specific data.
Skin contact	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	No specific data.
		XL1-Blue MRF' E.coli Strain	No specific data.
Ingestion	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	No specific data.
		XL1-Blue MRF' E.coli Strain	No specific data.

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

Section 4. First aid measures

Notes to physician	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		XL1-Blue MRF' E.coli Strain	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	No specific treatment.
		XL1-Blue MRF' E.coli Strain	No specific treatment.
Protection of first-aiders	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	No action shall be taken involving any personal risk or without suitable training.
		XL1-Blue MRF' E.coli Strain	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

Suitable extinguishing media	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	Use an extinguishing agent suitable for the surrounding fire.
		XL1-Blue MRF' E.coli Strain	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	None known.
		XL1-Blue MRF' E.coli Strain	None known.
Specific hazards arising from the chemical	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	In a fire or if heated, a pressure increase will occur and the container may burst.
		XL1-Blue MRF' E.coli Strain	In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	No specific data.
		XL1-Blue MRF' E.coli Strain	Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds metal oxide/oxides
Special protective actions for fire-fighters	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
		XL1-Blue MRF' E.coli Strain	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
		XL1-Blue MRF' E.coli Strain	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

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

Methods and material for containment and cleaning up

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

Section 7. Handling and storage

Precautions for safe handling

Protective measures	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	Put on appropriate personal protective equipment (see Section 8).
		XL1-Blue MRF' E.coli Strain	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour 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

Section 7. Handling and storage

reuse container.

Advice on general occupational hygiene

: pFA-CMV Vector (Fusion Trans-activator Plasmid): Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

XL1-Blue MRF' E.coli Strain: Potentially biohazardous material. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

: pFA-CMV Vector (Fusion Trans-activator Plasmid): 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.

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.

Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
XL1-Blue MRF' E.coli Strain Glycerol	**Safe Work Australia (Australia, 10/2022).** TWA: 10 mg/m³ 8 hours.

Biological exposure indices

No exposure indices known.

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.

Section 8. Exposure controls and personal protection

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 and safety characteristics

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

Appearance

Physical state	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	Liquid.
		XL1-Blue MRF' E.coli Strain	Liquid.
Colour	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	Not available.
		XL1-Blue MRF' E.coli Strain	Not available.
Odour	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	Not available.
		XL1-Blue MRF' E.coli Strain	Not available.
Odour threshold	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	Not available.
		XL1-Blue MRF' E.coli Strain	Not available.
pH	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	7.5
		XL1-Blue MRF' E.coli Strain	7
Melting point/freezing point	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	0°C (32°F)
		XL1-Blue MRF' E.coli Strain	Not available.
Boiling point, initial boiling point, and boiling range	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	100°C (212°F)
		XL1-Blue MRF' E.coli Strain	Not available.
Flash point	:		

Section 9. Physical and chemical properties and safety characteristics

Ingredient name	Closed cup °C	Closed cup °F	Closed cup Method	Open cup °C	Open cup °F	Open cup Method
XL1-Blue MRF' E. coli Strain						
Glycerol	-	-	-	177	350.6	-

Evaporation rate :

pFA-CMV Vector (Fusion Trans-activator Plasmid)	Not available.
XL1-Blue MRF' E.coli Strain	Not available.

Flammability :

pFA-CMV Vector (Fusion Trans-activator Plasmid)	Not applicable.
XL1-Blue MRF' E.coli Strain	Not applicable.

Lower and upper explosion limit/flammability limit :

pFA-CMV Vector (Fusion Trans-activator Plasmid)	Not available.
XL1-Blue MRF' E.coli Strain	Not available.

Vapour pressure :

Ingredient name	Vapour Pressure at 20˚C mm Hg	Vapour Pressure at 20˚C kPa	Vapour Pressure at 20˚C Method	Vapour pressure at 50˚C mm Hg	Vapour pressure at 50˚C kPa	Vapour pressure at 50˚C Method
pFA-CMV Vector (Fusion Trans-activator Plasmid)						
water	17.5	2.3	-	92.258	12.3	-
XL1-Blue MRF' E. coli Strain						
water	17.5	2.3	-	92.258	12.3	-
Glycerol	0.000075	0.00001	-	0.0025	0.00033	-

Relative vapour density :

pFA-CMV Vector (Fusion Trans-activator Plasmid)	Not available.
XL1-Blue MRF' E.coli Strain	Not available.

Relative density :

pFA-CMV Vector (Fusion Trans-activator Plasmid)	Not available.
XL1-Blue MRF' E.coli Strain	Not available.

Solubility(ies) :

Media	Result
pFA-CMV Vector (Fusion Trans-activator Plasmid)	
water	Soluble
XL1-Blue MRF' E.coli Strain	
water	Soluble

Partition coefficient: n-octanol/water :

pFA-CMV Vector (Fusion Trans-activator Plasmid)	Not applicable.
XL1-Blue MRF' E.coli Strain	Not applicable.

Auto-ignition temperature :

Ingredient name	°C	°F	Method
XL1-Blue MRF' E.coli Strain			
Glycerol	370	698	-

Decomposition temperature :

pFA-CMV Vector (Fusion Trans-activator Plasmid)	Not available.
XL1-Blue MRF' E.coli Strain	Not available.

Section 9. Physical and chemical properties and safety characteristics

Viscosity

: pFA-CMV Vector (Fusion Trans-activator Plasmid): Not available.

XL1-Blue MRF' E.coli Strain: Not available.

Particle characteristics

Median particle size

: pFA-CMV Vector (Fusion Trans-activator Plasmid): Not applicable.

XL1-Blue MRF' E.coli Strain: Not applicable.

Section 10. Stability and reactivity

Reactivity

: pFA-CMV Vector (Fusion Trans-activator Plasmid): No specific test data related to reactivity available for this product or its ingredients.

XL1-Blue MRF' E.coli Strain: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability

: pFA-CMV Vector (Fusion Trans-activator Plasmid): The product is stable.

XL1-Blue MRF' E.coli Strain: The product is stable.

Possibility of hazardous reactions

: pFA-CMV Vector (Fusion Trans-activator Plasmid): Under normal conditions of storage and use, hazardous reactions will not occur.

XL1-Blue MRF' E.coli Strain: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid

: pFA-CMV Vector (Fusion Trans-activator Plasmid): No specific data.

XL1-Blue MRF' E.coli Strain: No specific data.

Incompatible materials

: pFA-CMV Vector (Fusion Trans-activator Plasmid): May react or be incompatible with oxidising materials.

XL1-Blue MRF' E.coli Strain: May react or be incompatible with oxidising materials.

Hazardous decomposition products

: pFA-CMV Vector (Fusion Trans-activator Plasmid): Under normal conditions of storage and use, hazardous decomposition products should not be produced.

XL1-Blue MRF' E.coli Strain: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

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

Irritation/Corrosion

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

Sensitisation

Section 11. Toxicological information

Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	Not available.
		XL1-Blue MRF' E.coli Strain	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

Eye contact	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	No known significant effects or critical hazards.
		XL1-Blue MRF' E.coli Strain	Causes eye irritation.
Inhalation	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	No known significant effects or critical hazards.
		XL1-Blue MRF' E.coli Strain	No known significant effects or critical hazards.
Skin contact	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	No known significant effects or critical hazards.
		XL1-Blue MRF' E.coli Strain	No known significant effects or critical hazards.
Ingestion	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	No known significant effects or critical hazards.
		XL1-Blue MRF' E.coli Strain	No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	No specific data.
		XL1-Blue MRF' E.coli Strain	Adverse symptoms may include the following: irritation watering redness
Inhalation	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	No specific data.
		XL1-Blue MRF' E.coli Strain	No specific data.
Skin contact	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	No specific data.
		XL1-Blue MRF' E.coli Strain	No specific data.
Ingestion	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	No specific data.
		XL1-Blue MRF' E.coli Strain	No specific data.

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

Short term exposure

Section 11. Toxicological information

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	No known significant effects or critical hazards.
		XL1-Blue MRF' E.coli Strain	No known significant effects or critical hazards.
Carcinogenicity	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	No known significant effects or critical hazards.
		XL1-Blue MRF' E.coli Strain	No known significant effects or critical hazards.
Mutagenicity	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	No known significant effects or critical hazards.
		XL1-Blue MRF' E.coli Strain	No known significant effects or critical hazards.
Reproductive toxicity	:	pFA-CMV Vector (Fusion Trans-activator Plasmid)	No known significant effects or critical hazards.
		XL1-Blue MRF' E.coli Strain	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 (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
XL1-Blue MRF' E.coli Strain					
Glycerol	12600	N/A	N/A	N/A	N/A

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
XL1-Blue MRF' E.coli Strain			
Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - *Oncorhynchus mykiss*	96 hours

Persistence and degradability

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

Bioaccumulative potential

Section 12. Ecological information

Product/ingredient name	$LogP_{ow}$	BCF	Potential
XL1-Blue MRF' E.coli Strain			
Glycerol	-1.76	-	Low

Mobility in soil

Soil/water partition coefficient (K_{OC}) : 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 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. 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 spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

ADG / IMDG / IATA : Not regulated as Dangerous Goods according to the ADG Code .

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

Standard for the Uniform Scheduling of Medicines and Poisons

Not regulated.

Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

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.

Section 15. Regulatory information

Inventory list

Australia : All components are listed or exempted.

New Zealand : All components are listed or exempted.

United States : All components are active or exempted.

Section 16. Any other relevant information

History

Date of issue/Date of revision : 29/11/2023

Date of previous issue : 19/10/2020

Version : 7

Key to abbreviations : ADG = Australian Dangerous Goods
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SUSMP = Standard Uniform Schedule of Medicine and Poisons
UN = United Nations

Procedure used to derive the classification

Classification	Justification
XL1-Blue MRF' E.coli Strain SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2B	Calculation method

Indicates information that has changed from previously issued version.

Notice to reader

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