

SAFETY DATA SHEET



pFB-ERV Vector, Part Number 217564

Section 1. Identification

Product identifier : pFB-ERV Vector, Part Number 217564
Part No. (Chemical Kit) : 217564
Part No. : pFB-ERV Vector 217564-51
 pCFB-EGSH-Luc Control Vector 240028-52

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

Analytical reagent.

pFB-ERV Vector 0.01 ml (10 µg 1 µg/µl)
 pCFB-EGSH-Luc Control Vector 0.01 ml (10 µg 1 µg/µl)

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

Not classified.

GHS label elements

Signal word : pFB-ERV Vector No signal word.
 pCFB-EGSH-Luc Control Vector No signal word.

Hazard statements : pFB-ERV Vector No known significant effects or critical hazards.
 pCFB-EGSH-Luc Control Vector No known significant effects or critical hazards.

Precautionary statements

Prevention : pFB-ERV Vector Not applicable.
 pCFB-EGSH-Luc Control Vector Not applicable.

Response : pFB-ERV Vector Not applicable.
 pCFB-EGSH-Luc Control Vector Not applicable.

Storage : pFB-ERV Vector Not applicable.
 pCFB-EGSH-Luc Control Vector Not applicable.

Disposal : pFB-ERV Vector Not applicable.
 pCFB-EGSH-Luc Control Vector Not applicable.

Supplemental label elements : pFB-ERV Vector Not applicable.
 pCFB-EGSH-Luc Control Vector Not applicable.

Other hazards which do not result in classification : pFB-ERV Vector None known.
 pCFB-EGSH-Luc Control Vector None known.

Section 3. Composition and ingredient information

Substance/mixture : pFB-ERV Vector Mixture
pCFB-EGSH-Luc Control Mixture
Vector

CAS number/other identifiers

There are no 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

Eye contact	: pFB-ERV 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.
	pCFB-EGSH-Luc Control 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.
Inhalation	: pFB-ERV Vector	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	pCFB-EGSH-Luc Control Vector	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	: pFB-ERV Vector	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	pCFB-EGSH-Luc Control Vector	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	: pFB-ERV 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.
	pCFB-EGSH-Luc Control 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.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact	: pFB-ERV Vector pCFB-EGSH-Luc Control Vector	No known significant effects or critical hazards. No known significant effects or critical hazards.
Inhalation	: pFB-ERV Vector pCFB-EGSH-Luc Control Vector	No known significant effects or critical hazards. No known significant effects or critical hazards.
Skin contact	: pFB-ERV Vector pCFB-EGSH-Luc Control Vector	No known significant effects or critical hazards. No known significant effects or critical hazards.

Section 4. First aid measures

Ingestion	: pFB-ERV Vector pCFB-EGSH-Luc Control Vector	No known significant effects or critical hazards. No known significant effects or critical hazards.
<u>Over-exposure signs/symptoms</u>		
Eye contact	: pFB-ERV Vector pCFB-EGSH-Luc Control Vector	No specific data. No specific data.
Inhalation	: pFB-ERV Vector pCFB-EGSH-Luc Control Vector	No specific data. No specific data.
Skin contact	: pFB-ERV Vector pCFB-EGSH-Luc Control Vector	No specific data. No specific data.
Ingestion	: pFB-ERV Vector pCFB-EGSH-Luc Control Vector	No specific data. No specific data.

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

Notes to physician	: pFB-ERV Vector pCFB-EGSH-Luc Control Vector	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	: pFB-ERV Vector pCFB-EGSH-Luc Control Vector	No specific treatment. No specific treatment.
Protection of first-aiders	: pFB-ERV Vector pCFB-EGSH-Luc Control Vector	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.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

Suitable extinguishing media	: pFB-ERV Vector pCFB-EGSH-Luc Control Vector	Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: pFB-ERV Vector pCFB-EGSH-Luc Control Vector	None known. None known.
Specific hazards arising from the chemical	: pFB-ERV Vector pCFB-EGSH-Luc Control Vector	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 thermal decomposition products	: pFB-ERV Vector pCFB-EGSH-Luc Control Vector	No specific data. No specific data.

Section 5. Firefighting measures

Special protective actions for fire-fighters	: pFB-ERV Vector	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.
	pCFB-EGSH-Luc Control Vector	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	: pFB-ERV Vector	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	pCFB-EGSH-Luc Control Vector	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	: pFB-ERV Vector	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.
	pCFB-EGSH-Luc Control Vector	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	: pFB-ERV Vector	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".
	pCFB-EGSH-Luc Control Vector	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	: pFB-ERV Vector	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).
	pCFB-EGSH-Luc Control Vector	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).
<u>Methods and material for containment and cleaning up</u>		
Methods for cleaning up	: pFB-ERV 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.
	pCFB-EGSH-Luc Control Vector	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble.

Section 6. Accidental release measures

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	: pFB-ERV Vector	Put on appropriate personal protective equipment (see Section 8).
	pCFB-EGSH-Luc Control Vector	Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	: pFB-ERV 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.
	pCFB-EGSH-Luc Control 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.
Conditions for safe storage, including any incompatibilities	: pFB-ERV 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 unlabelled containers. Use appropriate containment to avoid environmental contamination.
	pCFB-EGSH-Luc Control 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 unlabelled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

None.

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** : 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

Physical state	:	pFB-ERV Vector	Liquid.
		pCFB-EGSH-Luc Control Vector	Liquid.
Colour	:	pFB-ERV Vector	Not available.
		pCFB-EGSH-Luc Control Vector	Not available.
Odour	:	pFB-ERV Vector	Not available.
		pCFB-EGSH-Luc Control Vector	Not available.
Odour threshold	:	pFB-ERV Vector	Not available.
		pCFB-EGSH-Luc Control Vector	Not available.
pH	:	pFB-ERV Vector	7.5
		pCFB-EGSH-Luc Control Vector	7.5
Melting point	:	pFB-ERV Vector	0°C (32°F)
		pCFB-EGSH-Luc Control Vector	0°C (32°F)
Boiling point	:	pFB-ERV Vector	100°C (212°F)
		pCFB-EGSH-Luc Control Vector	100°C (212°F)
Flash point	:	pFB-ERV Vector	Not available.
		pCFB-EGSH-Luc Control Vector	Not available.
Evaporation rate	:	pFB-ERV Vector	Not available.
		pCFB-EGSH-Luc Control Vector	Not available.
Flammability (solid, gas)	:	pFB-ERV Vector	Not applicable.
		pCFB-EGSH-Luc Control Vector	Not applicable.

Section 9. Physical and chemical properties

Lower and upper explosive (flammable) limits	: pFB-ERV Vector pCFB-EGSH-Luc Control Vector	Not available. Not available.
Vapour pressure	: pFB-ERV Vector pCFB-EGSH-Luc Control Vector	Not available. Not available.
Vapour density	: pFB-ERV Vector pCFB-EGSH-Luc Control Vector	Not available. Not available.
Relative density	: pFB-ERV Vector pCFB-EGSH-Luc Control Vector	Not available. Not available.
Solubility	: pFB-ERV Vector pCFB-EGSH-Luc Control Vector	Easily soluble in the following materials: cold water and hot water. Easily soluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/water	: pFB-ERV Vector pCFB-EGSH-Luc Control Vector	Not available. Not available.
Auto-ignition temperature	: pFB-ERV Vector pCFB-EGSH-Luc Control Vector	Not available. Not available.
Decomposition temperature	: pFB-ERV Vector pCFB-EGSH-Luc Control Vector	Not available. Not available.
Viscosity	: pFB-ERV Vector pCFB-EGSH-Luc Control Vector	Not available. Not available.

Section 10. Stability and reactivity

Reactivity	: pFB-ERV Vector pCFB-EGSH-Luc Control Vector	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.
Chemical stability	: pFB-ERV Vector pCFB-EGSH-Luc Control Vector	The product is stable. The product is stable.
Possibility of hazardous reactions	: pFB-ERV Vector pCFB-EGSH-Luc Control Vector	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: pFB-ERV Vector pCFB-EGSH-Luc Control Vector	No specific data. No specific data.
Incompatible materials	: pFB-ERV Vector pCFB-EGSH-Luc Control Vector	May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials.
Hazardous decomposition products	: pFB-ERV Vector pCFB-EGSH-Luc Control Vector	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

Not available.

Irritation/Corrosion

Not available.

Sensitisation

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

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 : pFB-ERV Vector Not available.
pCFB-EGSH-Luc Control Vector Not available.

Potential acute health effects

Eye contact : pFB-ERV Vector No known significant effects or critical hazards.
pCFB-EGSH-Luc Control Vector No known significant effects or critical hazards.

Inhalation : pFB-ERV Vector No known significant effects or critical hazards.
pCFB-EGSH-Luc Control Vector No known significant effects or critical hazards.

Skin contact : pFB-ERV Vector No known significant effects or critical hazards.
pCFB-EGSH-Luc Control Vector No known significant effects or critical hazards.

Ingestion : pFB-ERV Vector No known significant effects or critical hazards.
pCFB-EGSH-Luc Control Vector No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : pFB-ERV Vector No specific data.
pCFB-EGSH-Luc Control Vector No specific data.

Inhalation : pFB-ERV Vector No specific data.
pCFB-EGSH-Luc Control Vector No specific data.

Skin contact : pFB-ERV Vector No specific data.
pCFB-EGSH-Luc Control Vector No specific data.

Section 11. Toxicological information

Ingestion	:	pFB-ERV Vector	No specific data.
		pCFB-EGSH-Luc Control Vector	No specific data.

Delayed and immediate effects as well as 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

Not available.

General	:	pFB-ERV Vector	No known significant effects or critical hazards.
		pCFB-EGSH-Luc Control Vector	No known significant effects or critical hazards.
Carcinogenicity	:	pFB-ERV Vector	No known significant effects or critical hazards.
		pCFB-EGSH-Luc Control Vector	No known significant effects or critical hazards.
Mutagenicity	:	pFB-ERV Vector	No known significant effects or critical hazards.
		pCFB-EGSH-Luc Control Vector	No known significant effects or critical hazards.
Teratogenicity	:	pFB-ERV Vector	No known significant effects or critical hazards.
		pCFB-EGSH-Luc Control Vector	No known significant effects or critical hazards.
Developmental effects	:	pFB-ERV Vector	No known significant effects or critical hazards.
		pCFB-EGSH-Luc Control Vector	No known significant effects or critical hazards.
Fertility effects	:	pFB-ERV Vector	No known significant effects or critical hazards.
		pCFB-EGSH-Luc Control Vector	No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Section 12. Ecological information

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

Regulatory 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 Annex II of Marpol and the IBC Code : Not available.

Section 15. Regulatory information

Standard Uniform Schedule of Medicine and Poisons

Not regulated.

Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

Australia inventory (AICS) : All components are listed or exempted.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

International lists

National inventory

Canada : All components are listed or exempted.

Section 15. Regulatory information

China	: All components are listed or exempted.
Europe	: All components are listed or exempted.
Japan	: <input checked="" type="checkbox"/> Japan inventory (ENCS) : All components are listed or exempted. Japan inventory (ISHL) : All components are listed or exempted.
Malaysia	: Not determined.
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.
Turkey	: <input checked="" type="checkbox"/> Not determined.
United States	: All components are listed or exempted.

Section 16. Any other relevant information

History

Date of issue/Date of revision	: 24/03/2017
Date of previous issue	: 30/09/2015.
Version	: 4

Key to abbreviations	: ADG = Australian Dangerous Goods 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) NOHSC = National Occupational Health and Safety Commission SUSMP = Standard Uniform Schedule of Medicine and Poisons UN = United Nations
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Procedure used to derive the classification

Classification	Justification
Not classified.	

References : Not available.

Indicates information that has changed from previously issued version.

Notice to reader

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