

SAFETY DATA SHEET

pET 3a-d Vectors, Part Number 211521

Section 1. Identification

Product identifier	: pET 3a-d Vectors, Part Number 211521
Part no. (chemical kit)	: 211521
Part no.	: pET-3a Vector 211521-51
	pET-3b Vector 211521-52
	pET-3c Vector 211521-53
	pET-3d Vector 211521-54

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

Material uses	: Analytical reagent.
	pET-3a Vector 0.02 ml (20 µg 1 µg/µl)
	pET-3b Vector 0.02 ml (20 µg 1 µg/µl)
	pET-3c Vector 0.02 ml (20 µg 1 µg/µl)
	pET-3d Vector 0.02 ml (20 µg 1 µg/µl)

Supplier/Manufacturer	: Agilent Technologies Australia Pty Ltd 679 Springvale Road Mulgrave Victoria 3170, Australia 1800 802 402
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Emergency telephone number (with hours of operation)	: CHEMTREC®: +(61)-290372994
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Section 2. Hazard(s) identification

Classification of the substance or mixture

Not classified.

GHS label elements

Signal word	: pET-3a Vector No signal word. pET-3b Vector No signal word. pET-3c Vector No signal word. pET-3d Vector No signal word.
Hazard statements	: pET-3a Vector No known significant effects or critical hazards. pET-3b Vector No known significant effects or critical hazards. pET-3c Vector No known significant effects or critical hazards. pET-3d Vector No known significant effects or critical hazards.
<u>Precautionary statements</u>	
Prevention	: pET-3a Vector Not applicable. pET-3b Vector Not applicable. pET-3c Vector Not applicable. pET-3d Vector Not applicable.
Response	: pET-3a Vector Not applicable. pET-3b Vector Not applicable. pET-3c Vector Not applicable. pET-3d Vector Not applicable.
Storage	: pET-3a Vector Not applicable. pET-3b Vector Not applicable. pET-3c Vector Not applicable. pET-3d Vector Not applicable.

Section 2. Hazard(s) identification

Disposal	: pET-3a Vector pET-3b Vector pET-3c Vector pET-3d Vector	Not applicable. Not applicable. Not applicable. Not applicable.
Supplemental label elements		
Additional warning phrases	: pET-3a Vector pET-3b Vector pET-3c Vector pET-3d Vector	Not applicable. Not applicable. Not applicable. Not applicable.
Other hazards which do not result in classification	: pET-3a Vector pET-3b Vector pET-3c Vector pET-3d Vector	None known. None known. None known. None known.

Section 3. Composition and ingredient information

Substance/mixture	: pET-3a Vector pET-3b Vector pET-3c Vector pET-3d Vector	Mixture Mixture Mixture Mixture
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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	: pET-3a 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.
	pET-3b 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.
	pET-3c 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.
	pET-3d 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	: pET-3a Vector	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	pET-3b Vector	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	pET-3c Vector	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	pET-3d Vector	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Section 4. First aid measures

Skin contact	: pET-3a Vector	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	pET-3b Vector	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	pET-3c Vector	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	pET-3d Vector	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	: pET-3a Vector	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.
	pET-3b Vector	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.
	pET-3c Vector	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.
	pET-3d Vector	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.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact	: pET-3a Vector	No known significant effects or critical hazards.
	pET-3b Vector	No known significant effects or critical hazards.
	pET-3c Vector	No known significant effects or critical hazards.
	pET-3d Vector	No known significant effects or critical hazards.
Inhalation	: pET-3a Vector	No known significant effects or critical hazards.
	pET-3b Vector	No known significant effects or critical hazards.
	pET-3c Vector	No known significant effects or critical hazards.
	pET-3d Vector	No known significant effects or critical hazards.
Skin contact	: pET-3a Vector	No known significant effects or critical hazards.
	pET-3b Vector	No known significant effects or critical hazards.
	pET-3c Vector	No known significant effects or critical hazards.
	pET-3d Vector	No known significant effects or critical hazards.
Ingestion	: pET-3a Vector	No known significant effects or critical hazards.
	pET-3b Vector	No known significant effects or critical hazards.
	pET-3c Vector	No known significant effects or critical hazards.
	pET-3d Vector	No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	: pET-3a Vector	No specific data.
	pET-3b Vector	No specific data.
	pET-3c Vector	No specific data.
	pET-3d Vector	No specific data.
Inhalation	: pET-3a Vector	No specific data.
	pET-3b Vector	No specific data.
	pET-3c Vector	No specific data.
	pET-3d Vector	No specific data.

Section 4. First aid measures

Skin contact	:	pET-3a Vector	No specific data.
	:	pET-3b Vector	No specific data.
	:	pET-3c Vector	No specific data.
	:	pET-3d Vector	No specific data.
Ingestion	:	pET-3a Vector	No specific data.
	:	pET-3b Vector	No specific data.
	:	pET-3c Vector	No specific data.
	:	pET-3d Vector	No specific data.

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

Notes to physician	:	pET-3a Vector	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	:	pET-3b Vector	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	:	pET-3c Vector	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	:	pET-3d Vector	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	:	pET-3a Vector	No specific treatment.
	:	pET-3b Vector	No specific treatment.
	:	pET-3c Vector	No specific treatment.
	:	pET-3d Vector	No specific treatment.
Protection of first-aiders	:	pET-3a Vector	No action shall be taken involving any personal risk or without suitable training.
	:	pET-3b Vector	No action shall be taken involving any personal risk or without suitable training.
	:	pET-3c Vector	No action shall be taken involving any personal risk or without suitable training.
	:	pET-3d Vector	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	:	pET-3a Vector	Use an extinguishing agent suitable for the surrounding fire.
	:	pET-3b Vector	Use an extinguishing agent suitable for the surrounding fire.
	:	pET-3c Vector	Use an extinguishing agent suitable for the surrounding fire.
	:	pET-3d Vector	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	:	pET-3a Vector	None known.
	:	pET-3b Vector	None known.
	:	pET-3c Vector	None known.
	:	pET-3d Vector	None known.
Specific hazards arising from the chemical	:	pET-3a Vector	In a fire or if heated, a pressure increase will occur and the container may burst.
	:	pET-3b Vector	In a fire or if heated, a pressure increase will occur and the container may burst.
	:	pET-3c Vector	In a fire or if heated, a pressure increase will occur and the container may burst.
	:	pET-3d Vector	In a fire or if heated, a pressure increase will occur and the container may burst.

Section 5. Firefighting measures

Hazardous thermal decomposition products	: pET-3a Vector	No specific data.
	pET-3b Vector	No specific data.
	pET-3c Vector	No specific data.
	pET-3d Vector	No specific data.
Special protective actions for fire-fighters	: pET-3a 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.
	pET-3b 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.
	pET-3c 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.
	pET-3d 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	: pET-3a Vector	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	pET-3b Vector	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	pET-3c Vector	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	pET-3d 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	: pET-3a 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.
	pET-3b 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.
	pET-3c 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.
	pET-3d 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

Section 6. Accidental release measures

For emergency responders : pET-3a Vector

pET-3b Vector

pET-3c Vector

pET-3d Vector

protective equipment.

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".

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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 : pET-3a Vector

pET-3b Vector

pET-3c Vector

pET-3d 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).

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Methods and material for containment and cleaning up

Methods for cleaning up : pET-3a Vector

pET-3b Vector

pET-3c Vector

pET-3d 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.

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Section 6. Accidental release measures

disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

Protective measures	: pET-3a Vector	Put on appropriate personal protective equipment (see Section 8).
	pET-3b Vector	Put on appropriate personal protective equipment (see Section 8).
	pET-3c Vector	Put on appropriate personal protective equipment (see Section 8).
	pET-3d Vector	Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	: pET-3a 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.
	pET-3b 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.
	pET-3c 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.
	pET-3d 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	: pET-3a 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. See Section 10 for incompatible materials before handling or use.
	pET-3b 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. See Section 10 for incompatible materials before handling or use.

Section 7. Handling and storage

pET-3c 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. See Section 10 for incompatible materials before handling or use.

pET-3d 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. See Section 10 for incompatible materials before handling or use.

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.

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.

Section 8. Exposure controls and personal protection

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	pET-3a Vector	Liquid.
	pET-3b Vector	Liquid.
	pET-3c Vector	Liquid.
	pET-3d Vector	Liquid.
Colour	pET-3a Vector	Not available.
	pET-3b Vector	Not available.
	pET-3c Vector	Not available.
	pET-3d Vector	Not available.
Odour	pET-3a Vector	Not available.
	pET-3b Vector	Not available.
	pET-3c Vector	Not available.
	pET-3d Vector	Not available.
Odour threshold	pET-3a Vector	Not available.
	pET-3b Vector	Not available.
	pET-3c Vector	Not available.
	pET-3d Vector	Not available.
pH	pET-3a Vector	7.5
	pET-3b Vector	7.5
	pET-3c Vector	7.5
	pET-3d Vector	7.5
Melting point	pET-3a Vector	0°C (32°F)
	pET-3b Vector	0°C (32°F)
	pET-3c Vector	0°C (32°F)
	pET-3d Vector	0°C (32°F)
Boiling point	pET-3a Vector	100°C (212°F)
	pET-3b Vector	100°C (212°F)
	pET-3c Vector	100°C (212°F)
	pET-3d Vector	100°C (212°F)
Flash point	pET-3a Vector	Not available.
	pET-3b Vector	Not available.
	pET-3c Vector	Not available.
	pET-3d Vector	Not available.
Evaporation rate	pET-3a Vector	Not available.
	pET-3b Vector	Not available.
	pET-3c Vector	Not available.
	pET-3d Vector	Not available.
Flammability (solid, gas)	pET-3a Vector	Not applicable.
	pET-3b Vector	Not applicable.
	pET-3c Vector	Not applicable.
	pET-3d Vector	Not applicable.
Lower and upper explosive (flammable) limits	pET-3a Vector	Not available.
	pET-3b Vector	Not available.
	pET-3c Vector	Not available.
	pET-3d Vector	Not available.
Vapour pressure	pET-3a Vector	Not available.
	pET-3b Vector	Not available.
	pET-3c Vector	Not available.
	pET-3d Vector	Not available.
Vapour density	pET-3a Vector	Not available.
	pET-3b Vector	Not available.
	pET-3c Vector	Not available.
	pET-3d Vector	Not available.

Section 9. Physical and chemical properties

Relative density	: pET-3a Vector pET-3b Vector pET-3c Vector pET-3d Vector	Not available. Not available. Not available. Not available.
Solubility	: pET-3a Vector pET-3b Vector pET-3c Vector pET-3d Vector	Easily soluble in the following materials: cold water and hot water. Easily soluble in the following materials: cold water and hot water. Easily soluble in the following materials: cold water and hot water. Easily soluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/water	: pET-3a Vector pET-3b Vector pET-3c Vector pET-3d Vector	Not applicable. Not applicable. Not applicable. Not applicable.
Auto-ignition temperature	: pET-3a Vector pET-3b Vector pET-3c Vector pET-3d Vector	Not available. Not available. Not available. Not available.
Decomposition temperature	: pET-3a Vector pET-3b Vector pET-3c Vector pET-3d Vector	Not available. Not available. Not available. Not available.
Viscosity	: pET-3a Vector pET-3b Vector pET-3c Vector pET-3d Vector	Not available. Not available. Not available. Not available.

Section 10. Stability and reactivity

Reactivity	: pET-3a Vector pET-3b Vector pET-3c Vector pET-3d 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. 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	: pET-3a Vector pET-3b Vector pET-3c Vector pET-3d Vector	The product is stable. The product is stable. The product is stable. The product is stable.
Possibility of hazardous reactions	: pET-3a Vector pET-3b Vector pET-3c Vector pET-3d 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. 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	: pET-3a Vector pET-3b Vector pET-3c Vector pET-3d Vector	No specific data. No specific data. No specific data. No specific data.

Section 10. Stability and reactivity

Incompatible materials	: pET-3a Vector pET-3b Vector pET-3c Vector pET-3d Vector	May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials.
Hazardous decomposition products	: pET-3a Vector pET-3b Vector pET-3c Vector pET-3d 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. 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

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 : pET-3a Vector
pET-3b Vector
pET-3c Vector
pET-3d Vector

Not available.
Not available.
Not available.
Not available.

Potential acute health effects

Eye contact : pET-3a Vector
pET-3b Vector
pET-3c Vector
pET-3d Vector

No known significant effects or critical hazards.
No known significant effects or critical hazards.
No known significant effects or critical hazards.
No known significant effects or critical hazards.

Section 11. Toxicological information

Inhalation	: pET-3a Vector pET-3b Vector pET-3c Vector pET-3d Vector	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Skin contact	: pET-3a Vector pET-3b Vector pET-3c Vector pET-3d Vector	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Ingestion	: pET-3a Vector pET-3b Vector pET-3c Vector pET-3d Vector	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: pET-3a Vector pET-3b Vector pET-3c Vector pET-3d Vector	No specific data. No specific data. No specific data. No specific data.
Inhalation	: pET-3a Vector pET-3b Vector pET-3c Vector pET-3d Vector	No specific data. No specific data. No specific data. No specific data.
Skin contact	: pET-3a Vector pET-3b Vector pET-3c Vector pET-3d Vector	No specific data. No specific data. No specific data. No specific data.
Ingestion	: pET-3a Vector pET-3b Vector pET-3c Vector pET-3d Vector	No specific data. No specific data. No specific data. 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

General	: pET-3a Vector pET-3b Vector pET-3c Vector pET-3d Vector	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Carcinogenicity	: pET-3a Vector pET-3b Vector pET-3c Vector pET-3d Vector	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Mutagenicity	: pET-3a Vector pET-3b Vector pET-3c Vector pET-3d Vector	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Reproductive toxicity	: pET-3a Vector pET-3b Vector pET-3c Vector pET-3d Vector	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

Section 11. Toxicological information

[Numerical measures of toxicity](#)

[Acute toxicity estimates](#)

N/A

Section 12. Ecological information

[Toxicity](#)

Not available.

[Persistence and degradability](#)

Not available.

[Bioaccumulative potential](#)

Not available.

[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](#)

Section 15. Regulatory information

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.
Europe	: 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.
United States	:  All components are active or exempted.
Viet Nam	:  All components are listed or exempted.

Section 16. Any other relevant information

History

Date of issue/Date of revision : 31/08/2021

Date of previous issue : 16/04/2019

Version : 6

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
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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.

Section 16. Any other relevant information

[Notice to reader](#)

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