SAFETY DATA SHEET

pCMV-3Tag-1 Epitope Tagging Mammalian Expression Vector, Part Number 240195

Section 1. Identification

Product identifier : pCMV-3Tag-1 Epitope Tagging Mammalian Expression Vector, Part Number 240195
Part no. (chemical kit) : 240195
Part no. : pCMV-3Tag-1a Vector 240195-51
pCMV-3Tag-1b Mammalian Expression Vector 240195-52
pCMV-3Tag-1c Vector 240195-53

Material uses : Analytical reagent.

Material uses : pCMV-3Tag-1a Vector 0.02 ml
pCMV-3Tag-1b Mammalian Expression Vector 0.02 ml (20 µg 1 µg/µl)
pCMV-3Tag-1c Vector 0.02 ml (20 µg 1 µg/µl)

Supplier/Manufacturer : Agilent Technologies, Inc.
5301 Stevens Creek Blvd
Santa Clara, CA 95051, USA
800-227-9770

Emergency telephone number (with hours of operation) : CHEMTREC®: 1-800-424-9300

Section 2. Hazard identification

Classification of the substance or mixture
Not classified.

GHS label elements
No signal word.

Signal word : pCMV-3Tag-1a Vector
No signal word.
pCMV-3Tag-1b Mammalian Expression Vector
No signal word.
pCMV-3Tag-1c Vector
No signal word.

Hazard statements : pCMV-3Tag-1a Vector No known significant effects or critical hazards.
pCMV-3Tag-1b Mammalian Expression Vector No known significant effects or critical hazards.
pCMV-3Tag-1c Vector No known significant effects or critical hazards.

Precautionary statements

Prevention : pCMV-3Tag-1a Vector Not applicable.
pCMV-3Tag-1b Mammalian Expression Vector Not applicable.
pCMV-3Tag-1c Vector Not applicable.

Response : pCMV-3Tag-1a Vector Not applicable.
pCMV-3Tag-1b Mammalian Expression Vector Not applicable.
pCMV-3Tag-1c Vector Not applicable.

Storage : pCMV-3Tag-1a Vector Not applicable.
pCMV-3Tag-1b Mammalian Expression Vector Not applicable.
pCMV-3Tag-1c Vector Not applicable.
Section 2. Hazard identification

Disposal:
- pCMV-3Tag-1a Vector: Not applicable.
- pCMV-3Tag-1b Mammalian Expression Vector: Not applicable.
- pCMV-3Tag-1c Vector: Not applicable.

Supplemental label elements:
- pCMV-3Tag-1a Vector: None known.
- pCMV-3Tag-1b Mammalian Expression Vector: None known.
- pCMV-3Tag-1c Vector: None known.

Other hazards which do not result in classification:
- pCMV-3Tag-1a Vector: None known.
- pCMV-3Tag-1b Mammalian Expression Vector: None known.
- pCMV-3Tag-1c Vector: None known.

Section 3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Substance/mixture</th>
<th>pCMV-3Tag-1a Vector</th>
<th>pCMV-3Tag-1b Mammalian Expression Vector</th>
<th>pCMV-3Tag-1c Vector</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mixture</td>
<td>Mixture</td>
<td>Mixture</td>
</tr>
</tbody>
</table>

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**:
- pCMV-3Tag-1a 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.
- pCMV-3Tag-1b Mammalian Expression Vector: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- pCMV-3Tag-1c 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**:
- pCMV-3Tag-1a Vector: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- pCMV-3Tag-1b Mammalian Expression Vector: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- pCMV-3Tag-1c Vector: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

**Skin contact**:
- pCMV-3Tag-1a Vector: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- pCMV-3Tag-1b Mammalian Expression Vector: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- pCMV-3Tag-1c Vector: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
## Section 4. First-aid measures

### Ingestion

<table>
<thead>
<tr>
<th>Vector</th>
<th>First aid measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>pCMV-3Tag-1a Vector</td>
<td>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.</td>
</tr>
<tr>
<td>pCMV-3Tag-1b Mammalian Expression Vector</td>
<td>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.</td>
</tr>
<tr>
<td>pCMV-3Tag-1c Vector</td>
<td>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.</td>
</tr>
</tbody>
</table>

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

#### Potential acute health effects

<table>
<thead>
<tr>
<th>Eye contact</th>
<th>pCMV-3Tag-1a Vector</th>
<th>No known significant effects or critical hazards.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pCMV-3Tag-1b Mammalian Expression Vector</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pCMV-3Tag-1c Vector</td>
<td>No known significant effects or critical hazards.</td>
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</table>

<table>
<thead>
<tr>
<th>Inhalation</th>
<th>pCMV-3Tag-1a Vector</th>
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<tr>
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<td></td>
<td>pCMV-3Tag-1c Vector</td>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>

### Over-exposure signs/symptoms

<table>
<thead>
<tr>
<th>Eye contact</th>
<th>pCMV-3Tag-1a Vector</th>
<th>No specific data.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pCMV-3Tag-1b Mammalian Expression Vector</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>pCMV-3Tag-1c Vector</td>
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<td></td>
<td>pCMV-3Tag-1c Vector</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

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

Date of issue/Date of revision: 09/30/2021  Date of previous issue: 05/23/2019  Version: 6
Section 4. First-aid measures

Notes to physician:
- pCMV-3Tag-1a Vector: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- pCMV-3Tag-1b Mammalian Expression Vector: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- pCMV-3Tag-1c Vector: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments:
- pCMV-3Tag-1a Vector: No specific treatment.
- pCMV-3Tag-1b Mammalian Expression Vector: No specific treatment.
- pCMV-3Tag-1c Vector: No specific treatment.

Protection of first-aiders:
- pCMV-3Tag-1a Vector: No action shall be taken involving any personal risk or without suitable training.
- pCMV-3Tag-1b Mammalian Expression Vector: No action shall be taken involving any personal risk or without suitable training.
- pCMV-3Tag-1c Vector: No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media:
- Suitable extinguishing media:
  - pCMV-3Tag-1a Vector: Use an extinguishing agent suitable for the surrounding fire.
  - pCMV-3Tag-1b Mammalian Expression Vector: Use an extinguishing agent suitable for the surrounding fire.
  - pCMV-3Tag-1c Vector: Use an extinguishing agent suitable for the surrounding fire.

- Unsuitable extinguishing media:
  - pCMV-3Tag-1a Vector: None known.
  - pCMV-3Tag-1b Mammalian Expression Vector: None known.
  - pCMV-3Tag-1c Vector: None known.

Specific hazards arising from the chemical:
- pCMV-3Tag-1a Vector: In a fire or if heated, a pressure increase will occur and the container may burst.
- pCMV-3Tag-1b Mammalian Expression Vector: In a fire or if heated, a pressure increase will occur and the container may burst.
- pCMV-3Tag-1c Vector: In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products:
- pCMV-3Tag-1a Vector: No specific data.
- pCMV-3Tag-1b Mammalian Expression Vector: No specific data.
- pCMV-3Tag-1c Vector: No specific data.

Special protective actions for fire-fighters:
- pCMV-3Tag-1a 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.
- pCMV-3Tag-1b Mammalian Expression 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.
- pCMV-3Tag-1c 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
Section 5. Fire-fighting measures

Special protective equipment for fire-fighters:
- **pCMV-3Tag-1a Vector**: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- **pCMV-3Tag-1b Mammalian Expression Vector**: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- **pCMV-3Tag-1c 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:
- **pCMV-3Tag-1a 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 spilled material. Put on appropriate personal protective equipment.
- **pCMV-3Tag-1b Mammalian Expression 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 spilled material. Put on appropriate personal protective equipment.
- **pCMV-3Tag-1c 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 spilled material. Put on appropriate personal protective equipment.

For emergency responders:
- **pCMV-3Tag-1a Vector**: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- **pCMV-3Tag-1b Mammalian Expression Vector**: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- **pCMV-3Tag-1c Vector**: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions:
- **pCMV-3Tag-1a Vector**: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- **pCMV-3Tag-1b Mammalian Expression Vector**: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- **pCMV-3Tag-1c Vector**: Avoid dispersal of spilled material and runoff and
Section 6. Accidental release measures

Methods and materials for containment and cleaning up

Methods for cleaning up

- pCMV-3Tag-1a 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.

- pCMV-3Tag-1b Mammalian Expression Vector: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

- pCMV-3Tag-1c 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.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures:
  - pCMV-3Tag-1a Vector: Put on appropriate personal protective equipment (see Section 8).
  - pCMV-3Tag-1b Mammalian Expression Vector: Put on appropriate personal protective equipment (see Section 8).
  - pCMV-3Tag-1c Vector: Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene

- pCMV-3Tag-1a 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.

- pCMV-3Tag-1b Mammalian Expression Vector: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- pCMV-3Tag-1c 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.
Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities

pCMV-3Tag-1a Vector
Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

pCMV-3Tag-1b Mammalian Expression Vector
Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

pCMV-3Tag-1c Vector
Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/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.
Section 8. Exposure controls/personal protection

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: pCMV-3Tag-1a Vector Liquid.

Color: pCMV-3Tag-1a Vector Not available.

Odor: pCMV-3Tag-1a Vector Not available.

Odor threshold: pCMV-3Tag-1a Vector Not available.

pH: pCMV-3Tag-1a Vector Not available.

Melting point/freezing point: pCMV-3Tag-1a Vector 0°C (32°F)

Boiling point, initial boiling point, and boiling range: pCMV-3Tag-1a Vector 100°C (212°F)
# Section 9. Physical and chemical properties and safety characteristics

## Evaporation rate

- **pCMV-3Tag-1a Vector**: Not available.
- **pCMV-3Tag-1b Mammalian Expression Vector**: Not available.
- **pCMV-3Tag-1c Vector**: Not available.

## Flammability

- **pCMV-3Tag-1a Vector**: Not applicable.
- **pCMV-3Tag-1b Mammalian Expression Vector**: Not applicable.
- **pCMV-3Tag-1c Vector**: Not applicable.

## Lower and upper explosion limit/flammability limit

- **pCMV-3Tag-1a Vector**: Not available.
- **pCMV-3Tag-1b Mammalian Expression Vector**: Not available.
- **pCMV-3Tag-1c Vector**: Not available.

## Vapor pressure

### Ingredient name

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Vapor Pressure at 20°C</th>
<th>Vapor Pressure at 50°C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mm Hg</td>
<td>kPa</td>
</tr>
<tr>
<td><strong>pCMV-3Tag-1a Vector</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>23.8</td>
<td>3.2</td>
</tr>
<tr>
<td>2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>pCMV-3Tag-1b Mammalian Expression Vector</strong></td>
<td></td>
<td></td>
</tr>
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</tr>
</tbody>
</table>

## Relative vapor density

- **pCMV-3Tag-1a Vector**: Not available.
- **pCMV-3Tag-1b Mammalian Expression Vector**: Not available.
- **pCMV-3Tag-1c Vector**: Not available.
Section 9. Physical and chemical properties and safety characteristics

**Relative density**
- pCMV-3Tag-1a Vector: Not available.
- pCMV-3Tag-1b Mammalian Expression Vector: Not available.
- pCMV-3Tag-1c Vector: Not available.

**Solubility**
- pCMV-3Tag-1a Vector: Easily soluble in the following materials: cold water and hot water.
- pCMV-3Tag-1b Mammalian Expression Vector: Easily soluble in the following materials: cold water and hot water.
- pCMV-3Tag-1c Vector: Easily soluble in the following materials: cold water and hot water.

**Partition coefficient: n-octanol/water**
- pCMV-3Tag-1a Vector: Not applicable.
- pCMV-3Tag-1b Mammalian Expression Vector: Not applicable.
- pCMV-3Tag-1c Vector: Not applicable.

**Auto-ignition temperature**

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>°C</th>
<th>°F</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pCMV-3Tag-1a Vector Edetic acid</td>
<td>&gt;400</td>
<td>&gt;752</td>
<td>VDI 2263</td>
</tr>
<tr>
<td>pCMV-3Tag-1b Mammalian Expression Vector</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Edetic acid</td>
<td>&gt;400</td>
<td>&gt;752</td>
<td>VDI 2263</td>
</tr>
<tr>
<td>pCMV-3Tag-1c Vector Edetic acid</td>
<td>&gt;400</td>
<td>&gt;752</td>
<td>VDI 2263</td>
</tr>
</tbody>
</table>

**Decomposition temperature**
- pCMV-3Tag-1a Vector: Not available.
- pCMV-3Tag-1b Mammalian Expression Vector: Not available.
- pCMV-3Tag-1c Vector: Not available.

**Viscosity**
- pCMV-3Tag-1a Vector: Not available.
- pCMV-3Tag-1b Mammalian Expression Vector: Not available.
- pCMV-3Tag-1c Vector: Not available.

**Particle characteristics**

**Median particle size**
- pCMV-3Tag-1a Vector: Not applicable.
- pCMV-3Tag-1b Mammalian Expression Vector: Not applicable.
- pCMV-3Tag-1c Vector: Not applicable.

Section 10. Stability and reactivity

**Reactivity**
- pCMV-3Tag-1a Vector: No specific test data related to reactivity available for this product or its ingredients.
- pCMV-3Tag-1b Mammalian Expression Vector: No specific test data related to reactivity available for this product or its ingredients.
- pCMV-3Tag-1c Vector: No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability**
- pCMV-3Tag-1a Vector: The product is stable.
- pCMV-3Tag-1b Mammalian Expression Vector: The product is stable.
- pCMV-3Tag-1c Vector: The product is stable.
Section 10. Stability and reactivity

Possibility of hazardous reactions:
- pCMV-3Tag-1a Vector: Under normal conditions of storage and use, hazardous reactions will not occur.
- pCMV-3Tag-1b Mammalian Expression Vector: Under normal conditions of storage and use, hazardous reactions will not occur.
- pCMV-3Tag-1c Vector: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid:
- pCMV-3Tag-1a Vector: No specific data.
- pCMV-3Tag-1b Mammalian Expression Vector: No specific data.
- pCMV-3Tag-1c Vector: No specific data.

Incompatible materials:
- pCMV-3Tag-1a Vector: May react or be incompatible with oxidizing materials.
- pCMV-3Tag-1b Mammalian Expression Vector: May react or be incompatible with oxidizing materials.
- pCMV-3Tag-1c Vector: May react or be incompatible with oxidizing materials.

Hazardous decomposition products:
- pCMV-3Tag-1a Vector: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- pCMV-3Tag-1b Mammalian Expression Vector: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- pCMV-3Tag-1c Vector: 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.

Sensitization
Not available.

Mutagenicity
- Conclusion/Summary: Not available.

Carcinogenicity
- Conclusion/Summary: Not available.

Reproductive toxicity
- Conclusion/Summary: Not available.

Teratogenicity
- Conclusion/Summary: Not available.

Specific target organ toxicity (single exposure)
Not available.

Specific target organ toxicity (repeated exposure)
Not available.

Aspiration hazard
Not available.
### Section 11. Toxicological information

#### Information on the likely routes of exposure

<table>
<thead>
<tr>
<th>Route</th>
<th>pCMV-3Tag-1a Vector</th>
<th>pCMV-3Tag-1b Mammalian Expression Vector</th>
<th>pCMV-3Tag-1c Vector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
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<tr>
<td>Skin contact</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
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<tr>
<td>Ingestion</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
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#### Potential acute health effects

<table>
<thead>
<tr>
<th>Route</th>
<th>pCMV-3Tag-1a Vector</th>
<th>pCMV-3Tag-1b Mammalian Expression Vector</th>
<th>pCMV-3Tag-1c Vector</th>
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<tbody>
<tr>
<td>Eye contact</td>
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<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
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<tr>
<td>Inhalation</td>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
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<tr>
<td>Skin contact</td>
<td>No known significant effects or critical hazards.</td>
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<td>No known significant effects or critical hazards.</td>
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<td>Ingestion</td>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
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</table>

#### Symptoms related to the physical, chemical and toxicological characteristics

<table>
<thead>
<tr>
<th>Route</th>
<th>pCMV-3Tag-1a Vector</th>
<th>pCMV-3Tag-1b Mammalian Expression Vector</th>
<th>pCMV-3Tag-1c Vector</th>
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<tr>
<td>Eye contact</td>
<td>No specific data.</td>
<td>No specific data.</td>
<td>No specific data.</td>
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<tr>
<td>Inhalation</td>
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<td>No specific data.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>No specific data.</td>
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<td>No specific data.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>No specific data.</td>
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#### Delayed and immediate effects and also chronic effects from short and long term exposure

**Short term exposure**

<table>
<thead>
<tr>
<th>Effect</th>
<th>pCMV-3Tag-1a Vector</th>
<th>pCMV-3Tag-1b Mammalian Expression Vector</th>
<th>pCMV-3Tag-1c Vector</th>
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<tbody>
<tr>
<td>Potential immediate effects</td>
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<tr>
<td>Potential delayed effects</td>
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<td>Not available.</td>
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</table>

**Long term exposure**

<table>
<thead>
<tr>
<th>Effect</th>
<th>pCMV-3Tag-1a Vector</th>
<th>pCMV-3Tag-1b Mammalian Expression Vector</th>
<th>pCMV-3Tag-1c Vector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential immediate effects</td>
<td>Not available.</td>
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<td>Not available.</td>
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<tr>
<td>Potential delayed effects</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

**Potential chronic health effects**
Section 11. Toxicological information

**General**
- pCMV-3Tag-1a Vector: No known significant effects or critical hazards.
- pCMV-3Tag-1b Mammalian Expression Vector: No known significant effects or critical hazards.
- pCMV-3Tag-1c Vector: No known significant effects or critical hazards.

**Carcinogenicity**
- pCMV-3Tag-1a Vector: No known significant effects or critical hazards.
- pCMV-3Tag-1b Mammalian Expression Vector: No known significant effects or critical hazards.
- pCMV-3Tag-1c Vector: No known significant effects or critical hazards.

**Mutagenicity**
- pCMV-3Tag-1a Vector: No known significant effects or critical hazards.
- pCMV-3Tag-1b Mammalian Expression Vector: No known significant effects or critical hazards.
- pCMV-3Tag-1c Vector: No known significant effects or critical hazards.

**Reproductive toxicity**
- pCMV-3Tag-1a Vector: No known significant effects or critical hazards.
- pCMV-3Tag-1b Mammalian Expression Vector: No known significant effects or critical hazards.
- pCMV-3Tag-1c Vector: No known significant effects or critical hazards.

**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 minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
Section 14. Transport information

TDG / IMDG / IATA : Not regulated.

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

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

Canadian lists
Canadian NPR : None of the components are listed.
CEPA Toxic substances : None of the components are listed.

International regulations
Chemical Weapon Convention List Schedules I, II & III Chemicals
Not listed.

Montreal Protocol
Not listed.

Stockholm Convention on Persistent Organic Pollutants
Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)
Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals
Not listed.

Inventory list
Australia : 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. Other information

History

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<tr>
<th>Date of issue/Date of revision</th>
<th>09/30/2021</th>
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<tr>
<td>Date of previous issue</td>
<td>05/23/2019</td>
</tr>
<tr>
<td>Version</td>
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Key to abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ATE</td>
<td>Acute Toxicity Estimate</td>
</tr>
<tr>
<td>BCF</td>
<td>Bioconcentration Factor</td>
</tr>
<tr>
<td>GHS</td>
<td>Globally Harmonized System of Classification and Labelling of Chemicals</td>
</tr>
<tr>
<td>HPR</td>
<td>Hazardous Products Regulations</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>IBC</td>
<td>Intermediate Bulk Container</td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Dangerous Goods</td>
</tr>
<tr>
<td>LogPow</td>
<td>Logarithm of the octanol/water partition coefficient</td>
</tr>
<tr>
<td>N/A</td>
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<td>UN</td>
<td>United Nations</td>
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Procedure used to derive the classification

<table>
<thead>
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<th>Justification</th>
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<tbody>
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References

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<th>Description</th>
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<tbody>
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<td></td>
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Notice to reader

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