

# SAFETY DATA SHEET



Complete Control pEGSH Vector, Part Number 217461

## Section 1. Identification

**Product identifier** : Complete Control pEGSH Vector, Part Number 217461  
**Part No. (Chemical Kit)** : 217461  
**Part No.** : pEGSH Expression Vector 217461-51  
 pEGSH-Luc Vector (Positive Control) 217462-51  
 pEGSH Forward Primer Lyophilized 217466-53  
 T3 20-mer Primer Lyophilized 300301-71

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

Analytical reagent.

pEGSH Expression Vector	0.02 ml (20 µg 1 µg/µl)
pEGSH-Luc Vector (Positive Control)	0.02 ml (20 µg 1 µg/µl)
pEGSH Forward Primer Lyophilized	2.5 µg
T3 20-mer Primer Lyophilized	2.5 µg

**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

#### pEGSH Forward Primer Lyophilized

H315 SKIN CORROSION/IRRITATION - Category 2  
 H319 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A  
 H335 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation) - Category 3

#### T3 20-mer Primer Lyophilized

H315 SKIN CORROSION/IRRITATION - Category 2  
 H319 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A  
 H335 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation) - Category 3

pEGSH Forward Primer Lyophilized Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 86%

T3 20-mer Primer Lyophilized Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 86%

pEGSH Forward Primer Lyophilized Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 86%

T3 20-mer Primer Lyophilized Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 86%

### GHS label elements

## Section 2. Hazard(s) identification

### Hazard pictograms



### Signal word

pEGSH Expression Vector	No signal word.
pEGSH-Luc Vector (Positive Control)	No signal word.
pEGSH Forward Primer Lyophilized	WARNING
T3 20-mer Primer Lyophilized	WARNING

### Hazard statements

pEGSH Expression Vector	No known significant effects or critical hazards.
pEGSH-Luc Vector (Positive Control)	No known significant effects or critical hazards.
pEGSH Forward Primer Lyophilized	H319 - Causes serious eye irritation. H315 - Causes skin irritation. H335 - May cause respiratory irritation.
T3 20-mer Primer Lyophilized	H319 - Causes serious eye irritation. H315 - Causes skin irritation. H335 - May cause respiratory irritation.

### Precautionary statements

#### Prevention

pEGSH Expression Vector	Not applicable.
pEGSH-Luc Vector (Positive Control)	Not applicable.
pEGSH Forward Primer Lyophilized	P280 - Wear protective gloves. Wear eye or face protection. P271 - Use only outdoors or in a well-ventilated area. P261 - Avoid breathing dust. P264 - Wash hands thoroughly after handling.
T3 20-mer Primer Lyophilized	P280 - Wear protective gloves. Wear eye or face protection. P271 - Use only outdoors or in a well-ventilated area. P261 - Avoid breathing dust. P264 - Wash hands thoroughly after handling.

#### Response

pEGSH Expression Vector	Not applicable.
pEGSH-Luc Vector (Positive Control)	Not applicable.
pEGSH Forward Primer Lyophilized	P304 + P340 + P312 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. P302 + P352 + P362 + P363 - IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. P332 + P313 - If skin irritation occurs: Get medical attention. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical attention.
T3 20-mer Primer Lyophilized	P304 + P340 + P312 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. P302 + P352 + P362 + P363 - IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. P332 + P313 - If skin irritation occurs: Get medical attention. P305 + P351 + P338 - IF IN EYES: Rinse cautiously

## Section 2. Hazard(s) identification

		with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical attention.
<b>Storage</b>	: pEGSH Expression Vector pEGSH-Luc Vector (Positive Control) pEGSH Forward Primer Lyophilized T3 20-mer Primer Lyophilized	Not applicable. Not applicable. P405 - Store locked up. P405 - Store locked up.
<b>Disposal</b>	: pEGSH Expression Vector pEGSH-Luc Vector (Positive Control) pEGSH Forward Primer Lyophilized T3 20-mer Primer Lyophilized	Not applicable. Not applicable. P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations. P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
<b>Supplemental label elements</b>	: pEGSH Expression Vector pEGSH-Luc Vector (Positive Control) pEGSH Forward Primer Lyophilized T3 20-mer Primer Lyophilized	Not applicable. Not applicable. Not applicable. Not applicable.
<b>Other hazards which do not result in classification</b>	: pEGSH Expression Vector pEGSH-Luc Vector (Positive Control) pEGSH Forward Primer Lyophilized T3 20-mer Primer Lyophilized	None known. None known. None known. None known.

## Section 3. Composition and ingredient information

<b>Substance/mixture</b>	: pEGSH Expression Vector pEGSH-Luc Vector (Positive Control) pEGSH Forward Primer Lyophilized T3 20-mer Primer Lyophilized	Mixture Mixture Mixture Mixture
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### CAS number/other identifiers

Ingredient name	% (w/w)	CAS number
pEGSH Forward Primer Lyophilized 2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	≥75 - ≤90	1185-53-1
T3 20-mer Primer Lyophilized 2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	≥75 - ≤90	1185-53-1

There are no additional 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

: pEGSH 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.
pEGSH-Luc Vector (Positive Control)	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.
pEGSH Forward Primer Lyophilized	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
T3 20-mer Primer Lyophilized	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

#### Inhalation

: pEGSH Expression Vector	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
pEGSH-Luc Vector (Positive Control)	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
pEGSH Forward Primer Lyophilized	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
T3 20-mer Primer Lyophilized	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

## Section 4. First aid measures

<b>Skin contact</b>	:	pEGSH Expression Vector	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
		pEGSH-Luc Vector (Positive Control)	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
		pEGSH Forward Primer Lyophilized	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
		T3 20-mer Primer Lyophilized	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
<b>Ingestion</b>	:	pEGSH Expression 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.
		pEGSH-Luc Vector (Positive Control)	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.
		pEGSH Forward Primer Lyophilized	Wash out mouth with water. Remove dentures if any. 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. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
		T3 20-mer Primer Lyophilized	Wash out mouth with water. Remove dentures if any. 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. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

## Section 4. First aid measures

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

#### Potential acute health effects

<b>Eye contact</b>	:	pEGSH Expression Vector	No known significant effects or critical hazards.
		pEGSH-Luc Vector (Positive Control)	No known significant effects or critical hazards.
		pEGSH Forward Primer Lyophilized	Causes serious eye irritation.
<b>Inhalation</b>	:	T3 20-mer Primer Lyophilized	Causes serious eye irritation.
		pEGSH Expression Vector	No known significant effects or critical hazards.
		pEGSH-Luc Vector (Positive Control)	No known significant effects or critical hazards.
<b>Skin contact</b>	:	pEGSH Forward Primer Lyophilized	May cause respiratory irritation.
		T3 20-mer Primer Lyophilized	May cause respiratory irritation.
		pEGSH Expression Vector	No known significant effects or critical hazards.
<b>Ingestion</b>	:	pEGSH-Luc Vector (Positive Control)	No known significant effects or critical hazards.
		pEGSH Forward Primer Lyophilized	No known significant effects or critical hazards.
		T3 20-mer Primer Lyophilized	No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

<b>Eye contact</b>	:	pEGSH Expression Vector	No specific data.
		pEGSH-Luc Vector (Positive Control)	No specific data.
		pEGSH Forward Primer Lyophilized	Adverse symptoms may include the following: pain or irritation watering redness
<b>Inhalation</b>	:	T3 20-mer Primer Lyophilized	Adverse symptoms may include the following: pain or irritation watering redness
		pEGSH Expression Vector	No specific data.
		pEGSH-Luc Vector (Positive Control)	No specific data.
<b>Skin contact</b>	:	pEGSH Forward Primer Lyophilized	Adverse symptoms may include the following: respiratory tract irritation coughing
		T3 20-mer Primer Lyophilized	Adverse symptoms may include the following: respiratory tract irritation coughing
		pEGSH Expression Vector	No specific data.
		pEGSH-Luc Vector (Positive Control)	No specific data.
		pEGSH Forward Primer Lyophilized	Adverse symptoms may include the following: irritation redness
		T3 20-mer Primer Lyophilized	Adverse symptoms may include the following: irritation redness

## Section 4. First aid measures

<b>Ingestion</b>	: pEGSH Expression Vector	No specific data.
	pEGSH-Luc Vector (Positive Control)	No specific data.
	pEGSH Forward Primer Lyophilized	No specific data.
	T3 20-mer Primer Lyophilized	No specific data.

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

<b>Notes to physician</b>	: pEGSH Expression Vector	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	pEGSH-Luc Vector (Positive Control)	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	pEGSH Forward Primer Lyophilized	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
	T3 20-mer Primer Lyophilized	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

<b>Specific treatments</b>	: pEGSH Expression Vector	No specific treatment.
	pEGSH-Luc Vector (Positive Control)	No specific treatment.
	pEGSH Forward Primer Lyophilized	No specific treatment.
	T3 20-mer Primer Lyophilized	No specific treatment.

<b>Protection of first-aiders</b>	: pEGSH Expression Vector	No action shall be taken involving any personal risk or without suitable training.
	pEGSH-Luc Vector (Positive Control)	No action shall be taken involving any personal risk or without suitable training.
	pEGSH Forward Primer Lyophilized	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
	T3 20-mer Primer Lyophilized	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

## Section 5. Firefighting measures

### Extinguishing media

<b>Suitable extinguishing media</b>	: pEGSH Expression Vector	Use an extinguishing agent suitable for the surrounding fire.
	pEGSH-Luc Vector (Positive Control)	Use an extinguishing agent suitable for the surrounding fire.
	pEGSH Forward Primer Lyophilized	Use an extinguishing agent suitable for the surrounding fire.
	T3 20-mer Primer Lyophilized	Use an extinguishing agent suitable for the surrounding fire.

## Section 5. Firefighting measures

<b>Unsuitable extinguishing media</b>	: pEGSH Expression Vector pEGSH-Luc Vector (Positive Control) pEGSH Forward Primer Lyophilized T3 20-mer Primer Lyophilized	None known. None known. None known. None known.
<b>Specific hazards arising from the chemical</b>	: pEGSH Expression Vector pEGSH-Luc Vector (Positive Control) pEGSH Forward Primer Lyophilized T3 20-mer Primer Lyophilized	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. No specific fire or explosion hazard. No specific fire or explosion hazard.
<b>Hazardous thermal decomposition products</b>	: pEGSH Expression Vector pEGSH-Luc Vector (Positive Control) pEGSH Forward Primer Lyophilized T3 20-mer Primer Lyophilized	No specific data. No specific data. Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides phosphorus oxides halogenated compounds Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides phosphorus oxides halogenated compounds
<b>Special protective actions for fire-fighters</b>	: pEGSH Expression Vector pEGSH-Luc Vector (Positive Control) pEGSH Forward Primer Lyophilized T3 20-mer Primer Lyophilized	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
<b>Special protective equipment for fire-fighters</b>	: pEGSH Expression Vector pEGSH-Luc Vector (Positive Control) pEGSH Forward Primer Lyophilized T3 20-mer Primer Lyophilized	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus



## Section 5. Firefighting measures

(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

: pEGSH 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 spilt material. Put on appropriate personal protective equipment.
pEGSH-Luc Vector (Positive Control)	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.
pEGSH Forward Primer Lyophilized	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. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
T3 20-mer Primer Lyophilized	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. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

#### For emergency responders

: pEGSH Expression 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".
pEGSH-Luc Vector (Positive Control)	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".
pEGSH Forward Primer Lyophilized	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".
T3 20-mer Primer Lyophilized	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

: pEGSH Expression 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).
pEGSH-Luc Vector (Positive Control)	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).
pEGSH Forward Primer Lyophilized	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## Section 6. Accidental release measures

Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

T3 20-mer Primer Lyophilized Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and material for containment and cleaning up

<p><b>Methods for cleaning up</b> : pEGSH Expression Vector</p>	<p>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.</p>
<p>pEGSH-Luc Vector (Positive Control)</p>	<p>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.</p>
<p>pEGSH Forward Primer Lyophilized</p>	<p>Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.</p>
<p>T3 20-mer Primer Lyophilized</p>	<p>Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.</p>

## Section 7. Handling and storage

### Precautions for safe handling

<p><b>Protective measures</b> : pEGSH Expression Vector</p>	<p>Put on appropriate personal protective equipment (see Section 8).</p>
<p>pEGSH-Luc Vector (Positive Control)</p>	<p>Put on appropriate personal protective equipment (see Section 8).</p>
<p>pEGSH Forward Primer Lyophilized</p>	<p>Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.</p>
<p>T3 20-mer Primer Lyophilized</p>	<p>Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.</p>

## Section 7. Handling and storage

### Advice on general occupational hygiene

: pEGSH 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.
pEGSH-Luc Vector (Positive Control)	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.
pEGSH Forward Primer Lyophilized	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.
T3 20-mer Primer Lyophilized	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

: pEGSH 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 unlabelled containers. Use appropriate containment to avoid environmental contamination.
pEGSH-Luc Vector (Positive Control)	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.
pEGSH Forward Primer Lyophilized	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. Store locked up. 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.
T3 20-mer Primer Lyophilized	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

## Section 7. Handling and storage

drink. Store locked up. 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** : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- 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: chemical splash goggles.
- 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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- 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

<b>Physical state</b>	:	pEGSH Expression Vector	Liquid.
		pEGSH-Luc Vector (Positive Control)	Liquid.
		pEGSH Forward Primer Lyophilized	Solid. [lyophilised]
		T3 20-mer Primer Lyophilized	Solid. [lyophilised]
<b>Colour</b>	:	pEGSH Expression Vector	Not available.
		pEGSH-Luc Vector (Positive Control)	Not available.
		pEGSH Forward Primer Lyophilized	Not available.
		T3 20-mer Primer Lyophilized	Not available.
<b>Odour</b>	:	pEGSH Expression Vector	Not available.
		pEGSH-Luc Vector (Positive Control)	Not available.
		pEGSH Forward Primer Lyophilized	Not available.
		T3 20-mer Primer Lyophilized	Not available.
<b>Odour threshold</b>	:	pEGSH Expression Vector	Not available.
		pEGSH-Luc Vector (Positive Control)	Not available.
		pEGSH Forward Primer Lyophilized	Not available.
		T3 20-mer Primer Lyophilized	Not available.
<b>pH</b>	:	pEGSH Expression Vector	7.5
		pEGSH-Luc Vector (Positive Control)	7.5
		pEGSH Forward Primer Lyophilized	Not available.
		T3 20-mer Primer Lyophilized	Not available.
<b>Melting point</b>	:	pEGSH Expression Vector	0°C (32°F)
		pEGSH-Luc Vector (Positive Control)	0°C (32°F)
		pEGSH Forward Primer Lyophilized	Not available.
		T3 20-mer Primer Lyophilized	Not available.
<b>Boiling point</b>	:	pEGSH Expression Vector	100°C (212°F)
		pEGSH-Luc Vector (Positive Control)	100°C (212°F)
		pEGSH Forward Primer Lyophilized	Not available.
		T3 20-mer Primer Lyophilized	Not available.
<b>Flash point</b>	:	pEGSH Expression Vector	Not available.
		pEGSH-Luc Vector (Positive Control)	Not available.
		pEGSH Forward Primer Lyophilized	Not available.
		T3 20-mer Primer Lyophilized	Not available.
<b>Evaporation rate</b>	:	pEGSH Expression Vector	Not available.
		pEGSH-Luc Vector (Positive Control)	Not available.
		pEGSH Forward Primer Lyophilized	Not available.
		T3 20-mer Primer Lyophilized	Not available.
<b>Flammability (solid, gas)</b>	:	pEGSH Expression Vector	Not applicable.
		pEGSH-Luc Vector (Positive Control)	Not applicable.
		pEGSH Forward Primer Lyophilized	Not available.
		T3 20-mer Primer Lyophilized	Not available.

## Section 9. Physical and chemical properties

<b>Lower and upper explosive (flammable) limits</b>	: pEGSH Expression Vector pEGSH-Luc Vector (Positive Control) pEGSH Forward Primer Lyophilized T3 20-mer Primer Lyophilized	Not available. Not available. Not available. Not available.
<b>Vapour pressure</b>	: pEGSH Expression Vector pEGSH-Luc Vector (Positive Control) pEGSH Forward Primer Lyophilized T3 20-mer Primer Lyophilized	Not available. Not available. Not available. Not available.
<b>Vapour density</b>	: pEGSH Expression Vector pEGSH-Luc Vector (Positive Control) pEGSH Forward Primer Lyophilized T3 20-mer Primer Lyophilized	Not available. Not available. Not available. Not available.
<b>Relative density</b>	: pEGSH Expression Vector pEGSH-Luc Vector (Positive Control) pEGSH Forward Primer Lyophilized T3 20-mer Primer Lyophilized	Not available. Not available. Not available. Not available.
<b>Solubility</b>	: pEGSH Expression Vector pEGSH-Luc Vector (Positive Control) pEGSH Forward Primer Lyophilized T3 20-mer Primer Lyophilized	Easily soluble in the following materials: cold water and hot water. Easily soluble in the following materials: cold water and hot water. Soluble in the following materials: cold water and hot water. Soluble in the following materials: cold water and hot water.
<b>Partition coefficient: n-octanol/water</b>	: pEGSH Expression Vector pEGSH-Luc Vector (Positive Control) pEGSH Forward Primer Lyophilized T3 20-mer Primer Lyophilized	Not available. Not available. Not available. Not available.
<b>Auto-ignition temperature</b>	: pEGSH Expression Vector pEGSH-Luc Vector (Positive Control) pEGSH Forward Primer Lyophilized T3 20-mer Primer Lyophilized	Not available. Not available. Not available. Not available.
<b>Decomposition temperature</b>	: pEGSH Expression Vector pEGSH-Luc Vector (Positive Control) pEGSH Forward Primer Lyophilized T3 20-mer Primer Lyophilized	Not available. Not available. Not available. Not available.
<b>Viscosity</b>	: pEGSH Expression Vector pEGSH-Luc Vector (Positive Control) pEGSH Forward Primer Lyophilized T3 20-mer Primer Lyophilized	Not available. Not available. Not available. Not available.

## Section 10. Stability and reactivity

<b>Reactivity</b>	: pEGSH Expression Vector pEGSH-Luc Vector (Positive Control) pEGSH Forward Primer Lyophilized T3 20-mer Primer Lyophilized	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.
<b>Chemical stability</b>	: pEGSH Expression Vector pEGSH-Luc Vector (Positive Control) pEGSH Forward Primer Lyophilized T3 20-mer Primer Lyophilized	The product is stable. The product is stable. The product is stable. The product is stable.
<b>Possibility of hazardous reactions</b>	: pEGSH Expression Vector pEGSH-Luc Vector (Positive Control) pEGSH Forward Primer Lyophilized T3 20-mer Primer Lyophilized	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.
<b>Conditions to avoid</b>	: pEGSH Expression Vector pEGSH-Luc Vector (Positive Control) pEGSH Forward Primer Lyophilized T3 20-mer Primer Lyophilized	No specific data. No specific data. No specific data. No specific data.
<b>Incompatible materials</b>	: pEGSH Expression Vector pEGSH-Luc Vector (Positive Control) pEGSH Forward Primer Lyophilized T3 20-mer Primer Lyophilized	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.
<b>Hazardous decomposition products</b>	: pEGSH Expression Vector pEGSH-Luc Vector (Positive Control) pEGSH Forward Primer Lyophilized T3 20-mer Primer Lyophilized	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.

## Section 11. Toxicological information

### Sensitisation

Not available.

### Mutagenicity

Not available.

### Carcinogenicity

Not available.

### Reproductive toxicity

Not available.

### Teratogenicity

Not available.

### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
<b>pEGSH Forward Primer Lyophilized</b> 2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	Category 3	Not applicable.	Respiratory tract irritation
<b>T3 20-mer Primer Lyophilized</b> 2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	Category 3	Not applicable.	Respiratory tract irritation

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

**Information on likely routes of exposure** :

- pEGSH Expression Vector Not available.
- pEGSH-Luc Vector (Positive Control) Not available.
- pEGSH Forward Primer Lyophilized Routes of entry anticipated: Oral, Dermal, Inhalation.
- T3 20-mer Primer Lyophilized Routes of entry anticipated: Oral, Dermal, Inhalation.

### Potential acute health effects

**Eye contact** :

- pEGSH Expression Vector No known significant effects or critical hazards.
- pEGSH-Luc Vector (Positive Control) No known significant effects or critical hazards.
- pEGSH Forward Primer Lyophilized Causes serious eye irritation.
- T3 20-mer Primer Lyophilized Causes serious eye irritation.

**Inhalation** :

- pEGSH Expression Vector No known significant effects or critical hazards.
- pEGSH-Luc Vector (Positive Control) No known significant effects or critical hazards.
- pEGSH Forward Primer Lyophilized May cause respiratory irritation.
- T3 20-mer Primer Lyophilized May cause respiratory irritation.

**Skin contact** :

- pEGSH Expression Vector No known significant effects or critical hazards.
- pEGSH-Luc Vector (Positive Control) No known significant effects or critical hazards.
- pEGSH Forward Primer Lyophilized Causes skin irritation.
- T3 20-mer Primer Lyophilized Causes skin irritation.



## Section 11. Toxicological information

<b>Ingestion</b>	: pEGSH Expression Vector	No known significant effects or critical hazards.
	pEGSH-Luc Vector (Positive Control)	No known significant effects or critical hazards.
	pEGSH Forward Primer Lyophilized	No known significant effects or critical hazards.
	T3 20-mer Primer Lyophilized	No known significant effects or critical hazards.

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

<b>Eye contact</b>	: pEGSH Expression Vector	No specific data.
	pEGSH-Luc Vector (Positive Control)	No specific data.
	pEGSH Forward Primer Lyophilized	Adverse symptoms may include the following: pain or irritation watering redness
	T3 20-mer Primer Lyophilized	Adverse symptoms may include the following: pain or irritation watering redness

<b>Inhalation</b>	: pEGSH Expression Vector	No specific data.
	pEGSH-Luc Vector (Positive Control)	No specific data.
	pEGSH Forward Primer Lyophilized	Adverse symptoms may include the following: respiratory tract irritation coughing
	T3 20-mer Primer Lyophilized	Adverse symptoms may include the following: respiratory tract irritation coughing

<b>Skin contact</b>	: pEGSH Expression Vector	No specific data.
	pEGSH-Luc Vector (Positive Control)	No specific data.
	pEGSH Forward Primer Lyophilized	Adverse symptoms may include the following: irritation redness
	T3 20-mer Primer Lyophilized	Adverse symptoms may include the following: irritation redness

<b>Ingestion</b>	: pEGSH Expression Vector	No specific data.
	pEGSH-Luc Vector (Positive Control)	No specific data.
	pEGSH Forward Primer Lyophilized	No specific data.
	T3 20-mer Primer Lyophilized	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.

## Section 11. Toxicological information

<b>General</b>	:	pEGSH Expression Vector	No known significant effects or critical hazards.
		pEGSH-Luc Vector (Positive Control)	No known significant effects or critical hazards.
		pEGSH Forward Primer Lyophilized	No known significant effects or critical hazards.
		T3 20-mer Primer Lyophilized	No known significant effects or critical hazards.
<b>Carcinogenicity</b>	:	pEGSH Expression Vector	No known significant effects or critical hazards.
		pEGSH-Luc Vector (Positive Control)	No known significant effects or critical hazards.
		pEGSH Forward Primer Lyophilized	No known significant effects or critical hazards.
		T3 20-mer Primer Lyophilized	No known significant effects or critical hazards.
<b>Mutagenicity</b>	:	pEGSH Expression Vector	No known significant effects or critical hazards.
		pEGSH-Luc Vector (Positive Control)	No known significant effects or critical hazards.
		pEGSH Forward Primer Lyophilized	No known significant effects or critical hazards.
		T3 20-mer Primer Lyophilized	No known significant effects or critical hazards.
<b>Teratogenicity</b>	:	pEGSH Expression Vector	No known significant effects or critical hazards.
		pEGSH-Luc Vector (Positive Control)	No known significant effects or critical hazards.
		pEGSH Forward Primer Lyophilized	No known significant effects or critical hazards.
		T3 20-mer Primer Lyophilized	No known significant effects or critical hazards.
<b>Developmental effects</b>	:	pEGSH Expression Vector	No known significant effects or critical hazards.
		pEGSH-Luc Vector (Positive Control)	No known significant effects or critical hazards.
		pEGSH Forward Primer Lyophilized	No known significant effects or critical hazards.
		T3 20-mer Primer Lyophilized	No known significant effects or critical hazards.
<b>Fertility effects</b>	:	pEGSH Expression Vector	No known significant effects or critical hazards.
		pEGSH-Luc Vector (Positive Control)	No known significant effects or critical hazards.
		pEGSH Forward Primer Lyophilized	No known significant effects or critical hazards.
		T3 20-mer Primer Lyophilized	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

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

## Section 12. Ecological information

**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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. 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.

**China** : All components are listed or exempted.

## Section 15. Regulatory information

<b>Europe</b>	: All components are listed or exempted.
<b>Japan</b>	: <input checked="" type="checkbox"/> <b>Japan inventory (ENCS)</b> : All components are listed or exempted. <b>Japan inventory (ISHL)</b> : All components are listed or exempted.
<b>Malaysia</b>	: Not determined.
<b>New Zealand</b>	: All components are listed or exempted.
<b>Philippines</b>	: All components are listed or exempted.
<b>Republic of Korea</b>	: All components are listed or exempted.
<b>Taiwan</b>	: All components are listed or exempted.
<b>Turkey</b>	: <input checked="" type="checkbox"/> Not determined.
<b>United States</b>	: 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

### Procedure used to derive the classification

Classification	Justification
<input checked="" type="checkbox"/> <b>pEGSH Forward Primer Lyophilized</b> Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335	Calculation method Calculation method Calculation method
<b>T3 20-mer Primer Lyophilized</b> Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335	Calculation method Calculation method Calculation method

**References** : Not available.

Indicates information that has changed from previously issued version.

### Notice to reader

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