

# SAFETY DATA SHEET



LowInput QuickAmp Labeling Kit, Cy5, Part Number 5190-2307

## Section 1. Identification

<b>Product identifier</b>	: LowInput QuickAmp Labeling Kit, Cy5, Part Number 5190-2307	
<b>Part No. (Chemical Kit)</b>	: 5190-2307	
<b>Part No.</b>	<ul style="list-style-type: none"> <li>: Nuclease-Free Water</li> <li>T7 Primer</li> <li>5X First Strand Buffer</li> <li>0.1 M DTT</li> <li>10 mM dNTP Mix</li> <li>AffinityScript RT RNase Block Mix</li> <li>NTP Mix</li> <li>5x Transcription Buffer</li> <li>T7 RNA Polymerase Blend</li> <li>Cyanine-5-CTP</li> </ul>	<ul style="list-style-type: none"> <li>5190-2328</li> <li>5190-2320</li> <li>5190-2321</li> <li>5190-2322</li> <li>5190-2323</li> <li>5190-2324</li> <li>5190-2326</li> <li>5190-2325</li> <li>5190-2327</li> <li>5190-2330</li> </ul>

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

Analytical reagent.

Nuclease-Free Water	250 µl
T7 Primer	24 µl
5X First Strand Buffer	100 µl
0.1 M DTT	70 µl
10 mM dNTP Mix	20 µl
AffinityScript RT RNase Block Mix	36 µl
NTP Mix	35 µl
5x Transcription Buffer	160 µl
T7 RNA Polymerase Blend	10 µl
Cyanine-5-CTP	8 µl

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

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

## Section 2. Hazard(s) identification

### Classification of the substance or mixture

Not classified.

Nuclease-Free Water	Not applicable.
T7 Primer	Not applicable.
5X First Strand Buffer	Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 59%
0.1 M DTT	Not applicable.
10 mM dNTP Mix	Not applicable.
AffinityScript RT RNase Block Mix	Not applicable.
NTP Mix	Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 4%
5x Transcription Buffer	Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 1.7%
T7 RNA Polymerase Blend	Not applicable.
Cyanine-5-CTP	Not applicable.

## Section 2. Hazard(s) identification

Nuclease-Free Water	Not applicable.
T7 Primer	Not applicable.
5X First Strand Buffer	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 59%
0.1 M DTT	Not applicable.
10 mM dNTP Mix	Not applicable.
AffinityScript RT RNase	Not applicable.
Block Mix	
NTP Mix	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 4%
5x Transcription Buffer	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 1.7%
T7 RNA Polymerase Blend	Not applicable.
Cyanine-5-CTP	Not applicable.

### GHS label elements

#### Signal word

: Nuclease-Free Water	No signal word.
T7 Primer	No signal word.
5X First Strand Buffer	No signal word.
0.1 M DTT	No signal word.
10 mM dNTP Mix	No signal word.
AffinityScript RT RNase	No signal word.
Block Mix	
NTP Mix	No signal word.
5x Transcription Buffer	No signal word.
T7 RNA Polymerase Blend	No signal word.
Cyanine-5-CTP	No signal word.

#### Hazard statements

: Nuclease-Free Water	No known significant effects or critical hazards.
T7 Primer	No known significant effects or critical hazards.
5X First Strand Buffer	No known significant effects or critical hazards.
0.1 M DTT	No known significant effects or critical hazards.
10 mM dNTP Mix	No known significant effects or critical hazards.
AffinityScript RT RNase	No known significant effects or critical hazards.
Block Mix	
NTP Mix	No known significant effects or critical hazards.
5x Transcription Buffer	No known significant effects or critical hazards.
T7 RNA Polymerase Blend	No known significant effects or critical hazards.
Cyanine-5-CTP	No known significant effects or critical hazards.

### Precautionary statements

#### Prevention

: Nuclease-Free Water	Not applicable.
T7 Primer	Not applicable.
5X First Strand Buffer	Not applicable.
0.1 M DTT	Not applicable.
10 mM dNTP Mix	Not applicable.
AffinityScript RT RNase	Not applicable.
Block Mix	
NTP Mix	Not applicable.
5x Transcription Buffer	Not applicable.
T7 RNA Polymerase Blend	Not applicable.
Cyanine-5-CTP	Not applicable.

#### Response

: Nuclease-Free Water	Not applicable.
T7 Primer	Not applicable.
5X First Strand Buffer	Not applicable.
0.1 M DTT	Not applicable.
10 mM dNTP Mix	Not applicable.
AffinityScript RT RNase	Not applicable.
Block Mix	
NTP Mix	Not applicable.
5x Transcription Buffer	Not applicable.
T7 RNA Polymerase Blend	Not applicable.
Cyanine-5-CTP	Not applicable.

## Section 2. Hazard(s) identification

<b>Storage</b>	: <input checked="" type="checkbox"/> Nuclease-Free Water T7 Primer 5X First Strand Buffer 0.1 M DTT 10 mM dNTP Mix AffinityScript RT RNase Block Mix NTP Mix 5x Transcription Buffer T7 RNA Polymerase Blend Cyanine-5-CTP	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.
<b>Disposal</b>	: <input checked="" type="checkbox"/> Nuclease-Free Water T7 Primer 5X First Strand Buffer 0.1 M DTT 10 mM dNTP Mix AffinityScript RT RNase Block Mix NTP Mix 5x Transcription Buffer T7 RNA Polymerase Blend Cyanine-5-CTP	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.
<b>Supplemental label elements</b>	: <input checked="" type="checkbox"/> Nuclease-Free Water T7 Primer 5X First Strand Buffer 0.1 M DTT 10 mM dNTP Mix AffinityScript RT RNase Block Mix NTP Mix 5x Transcription Buffer T7 RNA Polymerase Blend Cyanine-5-CTP	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.
<b>Other hazards which do not result in classification</b>	: <input checked="" type="checkbox"/> Nuclease-Free Water T7 Primer 5X First Strand Buffer 0.1 M DTT 10 mM dNTP Mix AffinityScript RT RNase Block Mix NTP Mix 5x Transcription Buffer T7 RNA Polymerase Blend Cyanine-5-CTP	None known. None known. None known. None known. None known. None known. None known. None known. None known. None known. None known.

## Section 3. Composition and ingredient information

<b>Substance/mixture</b>	: <input checked="" type="checkbox"/> Nuclease-Free Water T7 Primer 5X First Strand Buffer 0.1 M DTT 10 mM dNTP Mix AffinityScript RT RNase Block Mix NTP Mix 5x Transcription Buffer T7 RNA Polymerase Blend Cyanine-5-CTP	Mixture Mixture Mixture Mixture Mixture Mixture Mixture Mixture Mixture Mixture Mixture
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### CAS number/other identifiers

## Section 3. Composition and ingredient information

Ingredient name	% (w/w)	CAS number
<b>Nuclease-Free Water</b> Water	100	7732-18-5
<b>AffinityScript RT RNase Block Mix</b> Glycerol	≥30 - ≤60	56-81-5
<b>5x Transcription Buffer</b> Polyethylene glycol	≥10 - ≤30	25322-68-3
<b>T7 RNA Polymerase Blend</b> Glycerol	≥30 - ≤60	56-81-5

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

<b>Eye contact</b>	: <b>Nuclease-Free Water</b>	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.
	T7 Primer	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.
	5X First Strand Buffer	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.
	0.1 M DTT	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.
	10 mM dNTP Mix	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.
	AffinityScript RT RNase Block Mix	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.
	NTP Mix	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.
	5x Transcription Buffer	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.
	T7 RNA Polymerase Blend	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.
	Cyanine-5-CTP	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.

## Section 4. First aid measures

<b>Inhalation</b>	:	Nuclease-Free Water	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
		T7 Primer	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
		5X First Strand Buffer	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
		0.1 M DTT	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
		10 mM dNTP Mix	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
		AffinityScript RT RNase Block Mix	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
		NTP Mix	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. 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.
		5x Transcription Buffer	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. 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.
		T7 RNA Polymerase Blend	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
		Cyanine-5-CTP	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	<b>Skin contact</b>	:	Nuclease-Free Water
		T7 Primer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
		5X First Strand Buffer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
		0.1 M DTT	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
		10 mM dNTP Mix	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
		AffinityScript RT RNase Block Mix	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
		NTP Mix	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
		5x Transcription Buffer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
		T7 RNA Polymerase Blend	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

## Section 4. First aid measures

	Cyanine-5-CTP	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
<b>Ingestion</b>	: Nuclease-Free Water	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.
	T7 Primer	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.
	5X First Strand Buffer	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.
	0.1 M DTT	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.
	10 mM dNTP Mix	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.
	AffinityScript RT RNase Block Mix	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.
	NTP Mix	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.
	5x Transcription Buffer	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.
	T7 RNA Polymerase Blend	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

## Section 4. First aid measures

### Cyanine-5-CTP

water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.  
Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

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

#### Potential acute health effects

<b>Eye contact</b>	: Nuclease-Free Water T7 Primer 5X First Strand Buffer 0.1 M DTT 10 mM dNTP Mix AffinityScript RT RNase Block Mix NTP Mix 5x Transcription Buffer T7 RNA Polymerase Blend Cyanine-5-CTP	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. 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. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Inhalation</b>	: Nuclease-Free Water T7 Primer 5X First Strand Buffer 0.1 M DTT 10 mM dNTP Mix AffinityScript RT RNase Block Mix NTP Mix 5x Transcription Buffer T7 RNA Polymerase Blend Cyanine-5-CTP	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. 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. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Skin contact</b>	: Nuclease-Free Water T7 Primer 5X First Strand Buffer 0.1 M DTT 10 mM dNTP Mix AffinityScript RT RNase Block Mix NTP Mix 5x Transcription Buffer T7 RNA Polymerase Blend Cyanine-5-CTP	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. 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. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Ingestion</b>	: Nuclease-Free Water T7 Primer 5X First Strand Buffer 0.1 M DTT 10 mM dNTP Mix AffinityScript RT RNase Block Mix NTP Mix 5x Transcription Buffer T7 RNA Polymerase Blend Cyanine-5-CTP	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. 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. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

## Section 4. First aid measures

<b>Eye contact</b>	:	☑ Nuclease-Free Water	No specific data.
		T7 Primer	No specific data.
		5X First Strand Buffer	No specific data.
		0.1 M DTT	No specific data.
		10 mM dNTP Mix	No specific data.
		AffinityScript RT RNase	No specific data.
		Block Mix	
		NTP Mix	No specific data.
		5x Transcription Buffer	No specific data.
		T7 RNA Polymerase Blend	No specific data.
<b>Inhalation</b>	:	☑ Nuclease-Free Water	No specific data.
		T7 Primer	No specific data.
		5X First Strand Buffer	No specific data.
		0.1 M DTT	No specific data.
		10 mM dNTP Mix	No specific data.
		AffinityScript RT RNase	No specific data.
		Block Mix	
		NTP Mix	No specific data.
		5x Transcription Buffer	No specific data.
		T7 RNA Polymerase Blend	No specific data.
<b>Skin contact</b>	:	☑ Nuclease-Free Water	No specific data.
		T7 Primer	No specific data.
		5X First Strand Buffer	No specific data.
		0.1 M DTT	No specific data.
		10 mM dNTP Mix	No specific data.
		AffinityScript RT RNase	No specific data.
		Block Mix	
		NTP Mix	No specific data.
		5x Transcription Buffer	No specific data.
		T7 RNA Polymerase Blend	No specific data.
<b>Ingestion</b>	:	☑ Nuclease-Free Water	No specific data.
		T7 Primer	No specific data.
		5X First Strand Buffer	No specific data.
		0.1 M DTT	No specific data.
		10 mM dNTP Mix	No specific data.
		AffinityScript RT RNase	No specific data.
		Block Mix	
		NTP Mix	No specific data.
		5x Transcription Buffer	No specific data.
		T7 RNA Polymerase Blend	No specific data.
	Cyanine-5-CTP	No specific data.	

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

<b>Notes to physician</b>	:	☑ Nuclease-Free Water	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		T7 Primer	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		5X First Strand Buffer	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		0.1 M DTT	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		10 mM dNTP Mix	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		AffinityScript RT RNase	Treat symptomatically. Contact poison treatment



## Section 4. First aid measures

	Block Mix	specialist immediately if large quantities have been ingested or inhaled.
	NTP Mix	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.
	5x Transcription Buffer	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.
	T7 RNA Polymerase Blend	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	Cyanine-5-CTP	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
<b>Specific treatments</b>	: Nuclease-Free Water	No specific treatment.
	T7 Primer	No specific treatment.
	5X First Strand Buffer	No specific treatment.
	0.1 M DTT	No specific treatment.
	10 mM dNTP Mix	No specific treatment.
	AffinityScript RT RNase	No specific treatment.
	Block Mix	
	NTP Mix	No specific treatment.
	5x Transcription Buffer	No specific treatment.
	T7 RNA Polymerase Blend	No specific treatment.
	Cyanine-5-CTP	No specific treatment.
<b>Protection of first-aiders</b>	: Nuclease-Free Water	No action shall be taken involving any personal risk or without suitable training.
	T7 Primer	No action shall be taken involving any personal risk or without suitable training.
	5X First Strand Buffer	No action shall be taken involving any personal risk or without suitable training.
	0.1 M DTT	No action shall be taken involving any personal risk or without suitable training.
	10 mM dNTP Mix	No action shall be taken involving any personal risk or without suitable training.
	AffinityScript RT RNase	No action shall be taken involving any personal risk or without suitable training.
	Block Mix	
	NTP Mix	No action shall be taken involving any personal risk or without suitable training.
	5x Transcription Buffer	No action shall be taken involving any personal risk or without suitable training.
	T7 RNA Polymerase Blend	No action shall be taken involving any personal risk or without suitable training.
	Cyanine-5-CTP	No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

## Section 5. Firefighting measures

### Extinguishing media

<b>Suitable extinguishing media</b>	: Nuclease-Free Water	Use an extinguishing agent suitable for the surrounding fire.
	T7 Primer	Use an extinguishing agent suitable for the surrounding fire.
	5X First Strand Buffer	Use an extinguishing agent suitable for the surrounding fire.
	0.1 M DTT	Use an extinguishing agent suitable for the surrounding fire.
	10 mM dNTP Mix	Use an extinguishing agent suitable for the surrounding fire.

## Section 5. Firefighting measures

	AffinityScript RT RNase Block Mix NTP Mix	surrounding fire. Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire.
	5x Transcription Buffer	Use an extinguishing agent suitable for the surrounding fire.
	T7 RNA Polymerase Blend	Use an extinguishing agent suitable for the surrounding fire.
	Cyanine-5-CTP	Use an extinguishing agent suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	: Nuclease-Free Water T7 Primer 5X First Strand Buffer 0.1 M DTT 10 mM dNTP Mix AffinityScript RT RNase Block Mix NTP Mix 5x Transcription Buffer T7 RNA Polymerase Blend Cyanine-5-CTP	None known. None known. None known. None known. None known. None known. None known. None known. None known. None known. None known.
<b>Specific hazards arising from the chemical</b>	: Nuclease-Free Water  T7 Primer  5X First Strand Buffer  0.1 M DTT  10 mM dNTP Mix  AffinityScript RT RNase Block Mix NTP Mix  5x Transcription Buffer  T7 RNA Polymerase Blend  Cyanine-5-CTP	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.  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.  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.  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.  In a fire or if heated, a pressure increase will occur and the container may burst.
<b>Hazardous thermal decomposition products</b>	: Nuclease-Free Water T7 Primer 5X First Strand Buffer  0.1 M DTT 10 mM dNTP Mix AffinityScript RT RNase Block Mix  NTP Mix	No specific data. No specific data. Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds metal oxide/oxides No specific data. No specific data. Decomposition products may include the following materials: carbon dioxide carbon monoxide Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides

## Section 5. Firefighting measures

	5x Transcription Buffer	phosphorus oxides Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds
	T7 RNA Polymerase Blend	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	Cyanine-5-CTP	No specific data.
<b>Special protective actions for fire-fighters</b>	: Nuclease-Free Water	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.
	T7 Primer	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.
	5X First Strand Buffer	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.
	0.1 M DTT	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.
	10 mM dNTP Mix	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.
	AffinityScript RT RNase Block Mix	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.
	NTP Mix	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.
	5x Transcription Buffer	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.
	T7 RNA Polymerase Blend	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.
	Cyanine-5-CTP	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>	: Nuclease-Free Water	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	T7 Primer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	5X First Strand Buffer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus

## Section 5. Firefighting measures

0.1 M DTT	(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.
10 mM dNTP Mix	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
AffinityScript RT RNase Block Mix	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
NTP Mix	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
5x Transcription Buffer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
T7 RNA Polymerase Blend	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Cyanine-5-CTP	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

<b>For non-emergency personnel</b>	: Nuclease-Free Water	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.
	T7 Primer	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.
	5X First Strand Buffer	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.
	0.1 M DTT	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.
	10 mM dNTP Mix	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.

## Section 6. Accidental release measures

AffinityScript RT RNase Block Mix	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.
NTP Mix	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.
5x Transcription Buffer	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.
T7 RNA Polymerase Blend	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.
Cyanine-5-CTP	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.

**For emergency responders :** Nuclease-Free Water

T7 Primer	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". 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".
5X First Strand Buffer	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".
0.1 M DTT	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".
10 mM dNTP Mix	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".
AffinityScript RT RNase Block Mix	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".
NTP Mix	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".
5x Transcription Buffer	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".
T7 RNA Polymerase Blend	If specialised clothing is required to deal with the

## Section 6. Accidental release measures

Cyanine-5-CTP

spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".  
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** :  Nuclease-Free Water

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).

T7 Primer

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).

5X First Strand Buffer

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).

0.1 M DTT

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).

10 mM dNTP Mix

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).

AffinityScript RT RNase Block Mix

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).

NTP Mix

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).

5x Transcription Buffer

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).

T7 RNA Polymerase Blend

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).

Cyanine-5-CTP

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](#)

## Section 6. Accidental release measures

<b>Methods for cleaning up</b>	: Nuclease-Free Water	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.
	T7 Primer	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.
	5X First Strand Buffer	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.
	0.1 M DTT	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.
	10 mM dNTP Mix	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.
	AffinityScript RT RNase Block Mix	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.
	NTP Mix	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.
	5x Transcription Buffer	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.
	T7 RNA Polymerase Blend	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.
	Cyanine-5-CTP	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

<b>Protective measures</b>	: <b>N</b> uclease-Free Water	Put on appropriate personal protective equipment (see Section 8).
	T7 Primer	Put on appropriate personal protective equipment (see Section 8).
	5X First Strand Buffer	Put on appropriate personal protective equipment (see Section 8).
	0.1 M DTT	Put on appropriate personal protective equipment (see Section 8).
	10 mM dNTP Mix	Put on appropriate personal protective equipment (see Section 8).
	AffinityScript RT RNase Block Mix	Put on appropriate personal protective equipment (see Section 8).
	NTP Mix	Put on appropriate personal protective equipment (see Section 8).
	5x Transcription Buffer	Put on appropriate personal protective equipment (see Section 8).
	T7 RNA Polymerase Blend	Put on appropriate personal protective equipment (see Section 8).
	Cyanine-5-CTP	Put on appropriate personal protective equipment (see Section 8).
<b>Advice on general occupational hygiene</b>	: <b>N</b> uclease-Free Water	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.
	T7 Primer	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.
	5X First Strand Buffer	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.
	0.1 M DTT	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.
	10 mM dNTP Mix	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.
	AffinityScript RT RNase Block Mix	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



## Section 7. Handling and storage

NTP Mix	additional information on hygiene measures. 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.
5x Transcription Buffer	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.
T7 RNA Polymerase Blend	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.
Cyanine-5-CTP	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** : Nuclease-Free Water

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.

T7 Primer	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.
5X First Strand Buffer	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.
0.1 M DTT	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from

## Section 7. Handling and storage

	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.
10 mM dNTP Mix	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.
AffinityScript RT RNase Block Mix	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.
NTP Mix	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.
5x Transcription Buffer	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.
T7 RNA Polymerase Blend	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.
Cyanine-5-CTP	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

## Section 7. Handling and storage

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

Ingredient name	Exposure limits
<b>AffinityScript RT RNase Block Mix</b> Glycerol	<b>Safe Work Australia (Australia, 1/2014).</b> TWA: 10 mg/m <sup>3</sup> 8 hours.
<b>5x Transcription Buffer</b> Polyethylene glycol	<b>TRGS900 AGW (Germany, 8/2010).</b> PEAK: 8000 mg/m <sup>3</sup> 15 minutes. Form: inhalable fraction TWA: 1000 mg/m <sup>3</sup> 8 hours. Form: inhalable fraction
<b>T7 RNA Polymerase Blend</b> Glycerol	<b>Safe Work Australia (Australia, 1/2014).</b> TWA: 10 mg/m <sup>3</sup> 8 hours.

- 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.
- 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>	:	Nuclease-Free Water	Liquid.
		T7 Primer	Liquid.
		5X First Strand Buffer	Liquid.
		0.1 M DTT	Liquid.
		10 mM dNTP Mix	Liquid.
		AffinityScript RT RNase	Liquid.
		Block Mix	
		NTP Mix	Liquid.
		5x Transcription Buffer	Liquid.
		T7 RNA Polymerase Blend	Liquid.
	Cyanine-5-CTP	Liquid.	
<b>Colour</b>	:	Nuclease-Free Water	Not available.
		T7 Primer	Not available.
		5X First Strand Buffer	Not available.
		0.1 M DTT	Not available.
		10 mM dNTP Mix	Not available.
		AffinityScript RT RNase	Not available.
		Block Mix	
		NTP Mix	Not available.
		5x Transcription Buffer	Not available.
		T7 RNA Polymerase Blend	Not available.
	Cyanine-5-CTP	Not available.	
<b>Odour</b>	:	Nuclease-Free Water	Not available.
		T7 Primer	Not available.
		5X First Strand Buffer	Not available.
		0.1 M DTT	Not available.
		10 mM dNTP Mix	Not available.
		AffinityScript RT RNase	Not available.
		Block Mix	
		NTP Mix	Not available.
		5x Transcription Buffer	Not available.
		T7 RNA Polymerase Blend	Not available.
	Cyanine-5-CTP	Not available.	
<b>Odour threshold</b>	:	Nuclease-Free Water	Not available.
		T7 Primer	Not available.
		5X First Strand Buffer	Not available.
		0.1 M DTT	Not available.
		10 mM dNTP Mix	Not available.
		AffinityScript RT RNase	Not available.
		Block Mix	
		NTP Mix	Not available.
		5x Transcription Buffer	Not available.
		T7 RNA Polymerase Blend	Not available.
	Cyanine-5-CTP	Not available.	
<b>pH</b>	:	Nuclease-Free Water	Not available.
		T7 Primer	Not available.
		5X First Strand Buffer	Not available.
		0.1 M DTT	Not available.
		10 mM dNTP Mix	Not available.
		AffinityScript RT RNase	Not available.
		Block Mix	
		NTP Mix	Not available.
		5x Transcription Buffer	Not available.
		T7 RNA Polymerase Blend	Not available.
	Cyanine-5-CTP	7.6	

## Section 9. Physical and chemical properties

<b>Melting point</b>	:	☑ Nuclease-Free Water	0°C (32°F)
		T7 Primer	0°C (32°F)
		5X First Strand Buffer	Not available.
		0.1 M DTT	0°C (32°F)
		10 mM dNTP Mix	0°C (32°F)
		AffinityScript RT RNase	Not available.
		Block Mix	
		NTP Mix	0°C (32°F)
		5x Transcription Buffer	Not available.
		T7 RNA Polymerase Blend	Not available.
		Cyanine-5-CTP	0°C (32°F)
<b>Boiling point</b>	:	☑ Nuclease-Free Water	100°C (212°F)
		T7 Primer	100°C (212°F)
		5X First Strand Buffer	Not available.
		0.1 M DTT	100°C (212°F)
		10 mM dNTP Mix	100°C (212°F)
		AffinityScript RT RNase	Not available.
		Block Mix	
		NTP Mix	100°C (212°F)
		5x Transcription Buffer	Not available.
		T7 RNA Polymerase Blend	Not available.
		Cyanine-5-CTP	100°C (212°F)
<b>Flash point</b>	:	☑ Nuclease-Free Water	Not available.
		T7 Primer	Not available.
		5X First Strand Buffer	Not available.
		0.1 M DTT	Not available.
		10 mM dNTP Mix	Not available.
		AffinityScript RT RNase	Not available.
		Block Mix	
		NTP Mix	Not available.
		5x Transcription Buffer	Not available.
		T7 RNA Polymerase Blend	Not available.
		Cyanine-5-CTP	Not available.
<b>Evaporation rate</b>	:	☑ Nuclease-Free Water	Not available.
		T7 Primer	Not available.
		5X First Strand Buffer	Not available.
		0.1 M DTT	Not available.
		10 mM dNTP Mix	Not available.
		AffinityScript RT RNase	Not available.
		Block Mix	
		NTP Mix	Not available.
		5x Transcription Buffer	Not available.
		T7 RNA Polymerase Blend	Not available.
		Cyanine-5-CTP	Not available.
<b>Flammability (solid, gas)</b>	:	☑ Nuclease-Free Water	Not applicable.
		T7 Primer	Not applicable.
		5X First Strand Buffer	Not applicable.
		0.1 M DTT	Not applicable.
		10 mM dNTP Mix	Not applicable.
		AffinityScript RT RNase	Not applicable.
		Block Mix	
		NTP Mix	Not applicable.
		5x Transcription Buffer	Not applicable.
		T7 RNA Polymerase Blend	Not applicable.
		Cyanine-5-CTP	Not applicable.
<b>Lower and upper explosive (flammable) limits</b>	:	☑ Nuclease-Free Water	Not available.
		T7 Primer	Not available.
		5X First Strand Buffer	Not available.
		0.1 M DTT	Not available.
		10 mM dNTP Mix	Not available.
		AffinityScript RT RNase	Not available.
	Block Mix		

## Section 9. Physical and chemical properties

	NTP Mix	Not available.
	5x Transcription Buffer	Not available.
	T7 RNA Polymerase Blend	Not available.
	Cyanine-5-CTP	Not available.
<b>Vapour pressure</b>	: Nuclease-Free Water	Not available.
	T7 Primer	Not available.
	5X First Strand Buffer	Not available.
	0.1 M DTT	Not available.
	10 mM dNTP Mix	Not available.
	AffinityScript RT RNase	Not available.
	Block Mix	
	NTP Mix	Not available.
	5x Transcription Buffer	Not available.
	T7 RNA Polymerase Blend	Not available.
	Cyanine-5-CTP	Not available.
<b>Vapour density</b>	: Nuclease-Free Water	Not available.
	T7 Primer	Not available.
	5X First Strand Buffer	Not available.
	0.1 M DTT	Not available.
	10 mM dNTP Mix	Not available.
	AffinityScript RT RNase	Not available.
	Block Mix	
	NTP Mix	Not available.
	5x Transcription Buffer	Not available.
	T7 RNA Polymerase Blend	Not available.
	Cyanine-5-CTP	Not available.
<b>Relative density</b>	: Nuclease-Free Water	Not available.
	T7 Primer	Not available.
	5X First Strand Buffer	Not available.
	0.1 M DTT	Not available.
	10 mM dNTP Mix	Not available.
	AffinityScript RT RNase	Not available.
	Block Mix	
	NTP Mix	Not available.
	5x Transcription Buffer	Not available.
	T7 RNA Polymerase Blend	Not available.
	Cyanine-5-CTP	Not available.
<b>Solubility</b>	: Nuclease-Free Water	Easily soluble in the following materials: cold water and hot water.
	T7 Primer	Easily soluble in the following materials: cold water and hot water.
	5X First Strand Buffer	Soluble in the following materials: cold water and hot water.
	0.1 M DTT	Easily soluble in the following materials: cold water and hot water.
	10 mM dNTP Mix	Easily soluble in the following materials: cold water and hot water.
	AffinityScript RT RNase	Soluble in the following materials: cold water and hot water.
	Block Mix	
	NTP Mix	Easily soluble in the following materials: cold water and hot water.
	5x Transcription Buffer	Easily soluble in the following materials: cold water and hot water.
	T7 RNA Polymerase Blend	Soluble in the following materials: cold water and hot water.
	Cyanine-5-CTP	Easily soluble in the following materials: cold water and hot water.

## Section 9. Physical and chemical properties

<b>Partition coefficient: n-octanol/water</b>	:	☑ Nuclease-Free Water	Not available.
		T7 Primer	Not available.
		5X First Strand Buffer	Not available.
		0.1 M DTT	Not available.
		10 mM dNTP Mix	Not available.
		AffinityScript RT RNase	Not available.
		Block Mix	
		NTP Mix	Not available.
		5x Transcription Buffer	Not available.
		T7 RNA Polymerase Blend	Not available.
<b>Auto-ignition temperature</b>	:	☑ Nuclease-Free Water	Not available.
		T7 Primer	Not available.
		5X First Strand Buffer	Not available.
		0.1 M DTT	Not available.
		10 mM dNTP Mix	Not available.
		AffinityScript RT RNase	Not available.
		Block Mix	
		NTP Mix	Not available.
		5x Transcription Buffer	Not available.
		T7 RNA Polymerase Blend	Not available.
<b>Decomposition temperature</b>	:	☑ Nuclease-Free Water	Not available.
		T7 Primer	Not available.
		5X First Strand Buffer	Not available.
		0.1 M DTT	Not available.
		10 mM dNTP Mix	Not available.
		AffinityScript RT RNase	Not available.
		Block Mix	
		NTP Mix	Not available.
		5x Transcription Buffer	Not available.
		T7 RNA Polymerase Blend	Not available.
<b>Viscosity</b>	:	☑ Nuclease-Free Water	Not available.
		T7 Primer	Not available.
		5X First Strand Buffer	Not available.
		0.1 M DTT	Not available.
		10 mM dNTP Mix	Not available.
		AffinityScript RT RNase	Not available.
		Block Mix	
		NTP Mix	Not available.
		5x Transcription Buffer	Not available.
		T7 RNA Polymerase Blend	Not available.
	Cyanine-5-CTP	Not available.	

## Section 10. Stability and reactivity

<b>Reactivity</b>	:	☑ Nuclease-Free Water	No specific test data related to reactivity available for this product or its ingredients.
		T7 Primer	No specific test data related to reactivity available for this product or its ingredients.
		5X First Strand Buffer	No specific test data related to reactivity available for this product or its ingredients.
		0.1 M DTT	No specific test data related to reactivity available for this product or its ingredients.
		10 mM dNTP Mix	No specific test data related to reactivity available for this product or its ingredients.
		AffinityScript RT RNase	No specific test data related to reactivity available for this product or its ingredients.
		Block Mix	No specific test data related to reactivity available for this product or its ingredients.
		NTP Mix	No specific test data related to reactivity available for this product or its ingredients.
		5x Transcription Buffer	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.

## Section 10. Stability and reactivity

T7 RNA Polymerase Blend	No specific test data related to reactivity available for this product or its ingredients.
Cyanine-5-CTP	No specific test data related to reactivity available for this product or its ingredients.

### Chemical stability

: Nuclease-Free Water	The product is stable.
T7 Primer	The product is stable.
5X First Strand Buffer	The product is stable.
0.1 M DTT	The product is stable.
10 mM dNTP Mix	The product is stable.
AffinityScript RT RNase Block Mix	The product is stable.
NTP Mix	The product is stable.
5x Transcription Buffer	The product is stable.
T7 RNA Polymerase Blend	The product is stable.
Cyanine-5-CTP	The product is stable.

### Possibility of hazardous reactions

: Nuclease-Free Water	Under normal conditions of storage and use, hazardous reactions will not occur.
T7 Primer	Under normal conditions of storage and use, hazardous reactions will not occur.
5X First Strand Buffer	Under normal conditions of storage and use, hazardous reactions will not occur.
0.1 M DTT	Under normal conditions of storage and use, hazardous reactions will not occur.
10 mM dNTP Mix	Under normal conditions of storage and use, hazardous reactions will not occur.
AffinityScript RT RNase Block Mix	Under normal conditions of storage and use, hazardous reactions will not occur.
NTP Mix	Under normal conditions of storage and use, hazardous reactions will not occur.
5x Transcription Buffer	Under normal conditions of storage and use, hazardous reactions will not occur.
T7 RNA Polymerase Blend	Under normal conditions of storage and use, hazardous reactions will not occur.
Cyanine-5-CTP	Under normal conditions of storage and use, hazardous reactions will not occur.

### Conditions to avoid

: Nuclease-Free Water	No specific data.
T7 Primer	No specific data.
5X First Strand Buffer	No specific data.
0.1 M DTT	No specific data.
10 mM dNTP Mix	No specific data.
AffinityScript RT RNase Block Mix	No specific data.
NTP Mix	No specific data.
5x Transcription Buffer	No specific data.
T7 RNA Polymerase Blend	No specific data.
Cyanine-5-CTP	No specific data.

### Incompatible materials

: Nuclease-Free Water	May react or be incompatible with oxidising materials.
T7 Primer	May react or be incompatible with oxidising materials.
5X First Strand Buffer	May react or be incompatible with oxidising materials.
0.1 M DTT	May react or be incompatible with oxidising materials.
10 mM dNTP Mix	May react or be incompatible with oxidising materials.
AffinityScript RT RNase Block Mix	May react or be incompatible with oxidising materials.
NTP Mix	May react or be incompatible with oxidising materials.
5x Transcription Buffer	May react or be incompatible with oxidising materials.
T7 RNA Polymerase Blend	May react or be incompatible with oxidising materials.
Cyanine-5-CTP	May react or be incompatible with oxidising materials.



## Section 10. Stability and reactivity

<b>Hazardous decomposition products</b>	: Nuclease-Free Water	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	T7 Primer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	5X First Strand Buffer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	0.1 M DTT	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	10 mM dNTP Mix	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	AffinityScript RT RNase Block Mix	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	NTP Mix	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	5x Transcription Buffer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	T7 RNA Polymerase Blend	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Cyanine-5-CTP	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
AffinityScript RT RNase Block Mix Glycerol	LD50 Oral	Rat	12600 mg/kg	-
T7 RNA Polymerase Blend Glycerol	LD50 Oral	Rat	12600 mg/kg	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
AffinityScript RT RNase Block Mix Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
5x Transcription Buffer Polyethylene glycol	Eyes - Mild irritant	Rabbit	-	-	-
	Skin - Mild irritant	Rabbit	-	-	-
T7 RNA Polymerase Blend Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500	-

## Section 11. Toxicological information

milligrams

### Sensitisation

Not available.

### Mutagenicity

Not available.

### Carcinogenicity

Not available.

### Reproductive toxicity

Not available.

### Teratogenicity

Not available.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

<b>Information on likely routes of exposure</b>	<b>:</b> <input checked="" type="checkbox"/> Nuclease-Free Water	Not available.
	T7 Primer	Not available.
	5X First Strand Buffer	Not available.
	0.1 M DTT	Not available.
	10 mM dNTP Mix	Not available.
	AffinityScript RT RNase Block Mix	Routes of entry anticipated: Oral, Dermal, Inhalation.
	NTP Mix	Not available.
	5x Transcription Buffer	Routes of entry anticipated: Oral, Dermal, Inhalation.
	T7 RNA Polymerase Blend	Routes of entry anticipated: Oral, Dermal, Inhalation.
	Cyanine-5-CTP	Not available.

### Potential acute health effects

<b>Eye contact</b>	<b>:</b> <input checked="" type="checkbox"/> Nuclease-Free Water	No known significant effects or critical hazards.
	T7 Primer	No known significant effects or critical hazards.
	5X First Strand Buffer	No known significant effects or critical hazards.
	0.1 M DTT	No known significant effects or critical hazards.
	10 mM dNTP Mix	No known significant effects or critical hazards.
	AffinityScript RT RNase Block Mix	No known significant effects or critical hazards.
	NTP Mix	No known significant effects or critical hazards.
	5x Transcription Buffer	No known significant effects or critical hazards.
	T7 RNA Polymerase Blend	No known significant effects or critical hazards.
	Cyanine-5-CTP	No known significant effects or critical hazards.
<b>Inhalation</b>	<b>:</b> <input checked="" type="checkbox"/> Nuclease-Free Water	No known significant effects or critical hazards.
	T7 Primer	No known significant effects or critical hazards.
	5X First Strand Buffer	No known significant effects or critical hazards.
	0.1 M DTT	No known significant effects or critical hazards.
	10 mM dNTP Mix	No known significant effects or critical hazards.
	AffinityScript RT RNase Block Mix	No known significant effects or critical hazards.
	NTP Mix	No known significant effects or critical hazards.
	5x Transcription Buffer	No known significant effects or critical hazards.
	T7 RNA Polymerase Blend	No known significant effects or critical hazards.
	Cyanine-5-CTP	No known significant effects or critical hazards.

## Section 11. Toxicological information

<b>Skin contact</b>	:	☑ Nuclease-Free Water	No known significant effects or critical hazards.
		T7 Primer	No known significant effects or critical hazards.
		5X First Strand Buffer	No known significant effects or critical hazards.
		0.1 M DTT	No known significant effects or critical hazards.
		10 mM dNTP Mix	No known significant effects or critical hazards.
		AffinityScript RT RNase	No known significant effects or critical hazards.
		Block Mix	
		NTP Mix	No known significant effects or critical hazards.
		5x Transcription Buffer	No known significant effects or critical hazards.
		T7 RNA Polymerase Blend	No known significant effects or critical hazards.
		Cyanine-5-CTP	No known significant effects or critical hazards.
<b>Ingestion</b>	:	☑ Nuclease-Free Water	No known significant effects or critical hazards.
		T7 Primer	No known significant effects or critical hazards.
		5X First Strand Buffer	No known significant effects or critical hazards.
		0.1 M DTT	No known significant effects or critical hazards.
		10 mM dNTP Mix	No known significant effects or critical hazards.
		AffinityScript RT RNase	No known significant effects or critical hazards.
		Block Mix	
		NTP Mix	No known significant effects or critical hazards.
		5x Transcription Buffer	No known significant effects or critical hazards.
		T7 RNA Polymerase Blend	No known significant effects or critical hazards.
		Cyanine-5-CTP	No known significant effects or critical hazards.

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

<b>Eye contact</b>	:	☑ Nuclease-Free Water	No specific data.
		T7 Primer	No specific data.
		5X First Strand Buffer	No specific data.
		0.1 M DTT	No specific data.
		10 mM dNTP Mix	No specific data.
		AffinityScript RT RNase	No specific data.
		Block Mix	
		NTP Mix	No specific data.
		5x Transcription Buffer	No specific data.
		T7 RNA Polymerase Blend	No specific data.
		Cyanine-5-CTP	No specific data.
<b>Inhalation</b>	:	☑ Nuclease-Free Water	No specific data.
		T7 Primer	No specific data.
		5X First Strand Buffer	No specific data.
		0.1 M DTT	No specific data.
		10 mM dNTP Mix	No specific data.
		AffinityScript RT RNase	No specific data.
		Block Mix	
		NTP Mix	No specific data.
		5x Transcription Buffer	No specific data.
		T7 RNA Polymerase Blend	No specific data.
		Cyanine-5-CTP	No specific data.
<b>Skin contact</b>	:	☑ Nuclease-Free Water	No specific data.
		T7 Primer	No specific data.
		5X First Strand Buffer	No specific data.
		0.1 M DTT	No specific data.
		10 mM dNTP Mix	No specific data.
		AffinityScript RT RNase	No specific data.
		Block Mix	
		NTP Mix	No specific data.
		5x Transcription Buffer	No specific data.
		T7 RNA Polymerase Blend	No specific data.
		Cyanine-5-CTP	No specific data.

## Section 11. Toxicological information

<b>Ingestion</b>	: Nuclease-Free Water	No specific data.
	T7 Primer	No specific data.
	5X First Strand Buffer	No specific data.
	0.1 M DTT	No specific data.
	10 mM dNTP Mix	No specific data.
	AffinityScript RT RNase	No specific data.
	Block Mix	
	NTP Mix	No specific data.
	5x Transcription Buffer	No specific data.
	T7 RNA Polymerase Blend	No specific data.
	Cyanine-5-CTP	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.

<b>General</b>	: Nuclease-Free Water	No known significant effects or critical hazards.
	T7 Primer	No known significant effects or critical hazards.
	5X First Strand Buffer	No known significant effects or critical hazards.
	0.1 M DTT	No known significant effects or critical hazards.
	10 mM dNTP Mix	No known significant effects or critical hazards.
	AffinityScript RT RNase	No known significant effects or critical hazards.
	Block Mix	
	NTP Mix	No known significant effects or critical hazards.
	5x Transcription Buffer	No known significant effects or critical hazards.
	T7 RNA Polymerase Blend	No known significant effects or critical hazards.
	Cyanine-5-CTP	No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: Nuclease-Free Water	No known significant effects or critical hazards.
	T7 Primer	No known significant effects or critical hazards.
	5X First Strand Buffer	No known significant effects or critical hazards.
	0.1 M DTT	No known significant effects or critical hazards.
	10 mM dNTP Mix	No known significant effects or critical hazards.
	AffinityScript RT RNase	No known significant effects or critical hazards.
	Block Mix	
	NTP Mix	No known significant effects or critical hazards.
	5x Transcription Buffer	No known significant effects or critical hazards.
	T7 RNA Polymerase Blend	No known significant effects or critical hazards.
	Cyanine-5-CTP	No known significant effects or critical hazards.
<b>Mutagenicity</b>	: Nuclease-Free Water	No known significant effects or critical hazards.
	T7 Primer	No known significant effects or critical hazards.
	5X First Strand Buffer	No known significant effects or critical hazards.
	0.1 M DTT	No known significant effects or critical hazards.
	10 mM dNTP Mix	No known significant effects or critical hazards.
	AffinityScript RT RNase	No known significant effects or critical hazards.
	Block Mix	
	NTP Mix	No known significant effects or critical hazards.
	5x Transcription Buffer	No known significant effects or critical hazards.
	T7 RNA Polymerase Blend	No known significant effects or critical hazards.
	Cyanine-5-CTP	No known significant effects or critical hazards.

## Section 11. Toxicological information

<b>Teratogenicity</b>	: Nuclease-Free Water T7 Primer 5X First Strand Buffer 0.1 M DTT 10 mM dNTP Mix AffinityScript RT RNase Block Mix NTP Mix 5x Transcription Buffer T7 RNA Polymerase Blend Cyanine-5-CTP	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. 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. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Developmental effects</b>	: Nuclease-Free Water T7 Primer 5X First Strand Buffer 0.1 M DTT 10 mM dNTP Mix AffinityScript RT RNase Block Mix NTP Mix 5x Transcription Buffer T7 RNA Polymerase Blend Cyanine-5-CTP	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. 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. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Fertility effects</b>	: Nuclease-Free Water T7 Primer 5X First Strand Buffer 0.1 M DTT 10 mM dNTP Mix AffinityScript RT RNase Block Mix NTP Mix 5x Transcription Buffer T7 RNA Polymerase Blend Cyanine-5-CTP	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. 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. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Not available.

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
<b>AffinityScript RT RNase Block Mix</b> Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
<b>5x Transcription Buffer</b> Polyethylene glycol	Acute LC50 >1000000 µg/l Fresh water	Fish - Salmo salar - Parr	96 hours
<b>T7 RNA Polymerase Blend</b> Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours

### Persistence and degradability

Not available.

### Bioaccumulative potential

## Section 12. Ecological information

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<b>AffinityScript RT RNase Block Mix</b> Glycerol	-1.76	-	low
<b>T7 RNA Polymerase Blend</b> Glycerol	-1.76	-	low

### Mobility in soil

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

**Other adverse effects** :  No known significant effects or critical hazards.

## Section 13. Disposal considerations

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

## Section 14. Transport information

### Regulatory information

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

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

**Transport in bulk according to Annex II of Marpol and the IBC Code** : Not available.

## Section 15. Regulatory information

### Standard Uniform Schedule of Medicine and Poisons

Not regulated.

### Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

**Australia inventory (AICS)** :  Not determined.

### 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.

## Section 15. Regulatory information

### Rotterdam Convention on Prior Inform Consent (PIC)

Not listed.

### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### International lists

#### National inventory

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

## Section 16. Any other relevant information

### History

<b>Date of issue/Date of revision</b>	: 23/02/2016
<b>Date of previous issue</b>	: 29/01/2014.
<b>Version</b>	: 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
Not classified.	

**References** : Not available.

Indicates information that has changed from previously issued version.

### Notice to reader

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