

# SAFETY DATA SHEET



High-Specificity miRNA QRT-PCR Detection Kit, Part Number 600580

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

<b>Product name</b>	: High-Specificity miRNA QRT-PCR Detection Kit, Part Number 600580
<b>Part No. (Kit)</b>	: 600580
<b>Part No.</b>	: E.coli Poly A Polymerase 600035-51 5X E.coli Poly A 600035-52 Polymerase Buffer 25 mM Manganese Chloride 600035-53 10 mM rATP (pH 7.5) in Sterile Water 200340-81 Glycogen 252003-59 10X AffinityScript RT buffer 600100-52 RT Adaptor Primer 600035-54 100 mM dNTP Mix (25 mM each dNTP) 200820-55 AffinityScript RT/RNase Block Enzyme Mixture 600559-52 Universal Reverse Primer 600035-55 Reference Dye 600530-53 20X EvaGreen 600545-51 PCR Enzyme Blend 600545-52 20 mM dNTP Mix (5 mM each dNTP) 600545-53 10X Core PCR Buffer 600545-54 50 mM Magnesium Chloride 600545-55

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

Identified uses	
Analytical reagent.	
E.coli Poly A Polymerase	0.05 ml
5X E.coli Poly A Polymerase Buffer	0.2 ml
25 mM Manganese Chloride	0.05 ml
rATP	0.25 ml
Glycogen	0.03 ml
10X AffinityScript RT buffer	0.1 ml
RT Adaptor Primer	0.05 ml
100 mM dNTP Mix (25 mM each dNTP)	0.04 ml
AffinityScript RT/RNase Block Enzyme Mixture	0.05 ml
Universal Reverse Primer	0.2 ml
Reference Dye	0.1 ml
20X EvaGreen	0.25 ml
PCR Enzyme Blend	0.1 ml
20 mM dNTP Mix (5 mM each dNTP)	0.2 ml
10X Core PCR Buffer	0.5 ml
50 mM Magnesium Chloride	0.55 ml

### 1.3 Details of the supplier of the safety data sheet

Agilent Technologies Manufacturing GmbH & Co. KG  
Hewlett-Packard-Str. 8  
76337 Waldbronn  
Germany  
0800 603 1000

**Date of issue/Date of revision** : 30/03/2016

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**e-mail address of person responsible for this SDS** : pdl-msds\_author@agilent.com

**1.4 Emergency telephone number**

**Emergency telephone number (with hours of operation)** : CHEMTREC®: +(44)-870-8200418

**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture**

<b>Product definition</b>	:	E.coli Poly A Polymerase	Mixture
		5X E.coli Poly A Polymerase Buffer	Mixture
		25 mM Manganese Chloride	Mixture
		10 mM rATP (pH 7.5) in Sterile Water	Mixture
		Glycogen	Mixture
		10X AffinityScript RT buffer	Mixture
		RT Adaptor Primer	Mixture
		100 mM dNTPs	Mixture
		AffinityScript RT/RNase Block Enzyme Mixture	Mixture
		Universal Reverse Primer	Mixture
		Reference Dye	Mixture
		20X EvaGreen	Mixture
		PCR Enzyme Blend	Mixture
		20 mM dNTP Mix	Mixture
		10X Core PCR Buffer	Mixture
		50 mM Magnesium Chloride	Mixture

**Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]****5X E.coli Poly A Polymerase Buffer****H319**

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2

<b>Ingredients of unknown toxicity</b>	:	E.coli Poly A Polymerase	Not applicable.
		5X E.coli Poly A Polymerase Buffer	Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 3.9%
		25 mM Manganese Chloride	Not applicable.
		10 mM rATP (pH 7.5) in Sterile Water	Not applicable.
		Glycogen	Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 2%
		10X AffinityScript RT buffer	Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 7.9%
		RT Adaptor Primer	Not applicable.
		100 mM dNTP Mix (25 mM each dNTP)	Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 6%
		AffinityScript RT/RNase Block Enzyme Mixture	Not applicable.
		Universal Reverse Primer	Not applicable.
		Reference Dye	Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 2.4%
		20X EvaGreen	Not applicable.
		PCR Enzyme Blend	Not applicable.

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	20 mM dNTP Mix (5 mM each dNTP)	Not applicable.
	10X Core PCR Buffer	Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 2.4%
	50 mM Magnesium Chloride	Not applicable.
<b>Ingredients of unknown ecotoxicity</b>	: E.coli Poly A Polymerase	Not applicable.
	5X E.coli Poly A Polymerase Buffer	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 4.9%
	25 mM Manganese Chloride	Not applicable.
	10 mM rATP (pH 7.5) in Sterile Water	Not applicable.
	Glycogen	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 2%
	10X AffinityScript RT buffer	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 7.9%
	RT Adaptor Primer	Not applicable.
	100 mM dNTP Mix (25 mM each dNTP)	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 6%
	AffinityScript RT/RNase Block Enzyme Mixture	Not applicable.
	Universal Reverse Primer	Not applicable.
	Reference Dye	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 2.4%
	20X EvaGreen PCR Enzyme Blend	Not applicable.
	20 mM dNTP Mix (5 mM each dNTP)	Not applicable.
	10X Core PCR Buffer	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 2.4%
50 mM Magnesium Chloride	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 1%	

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

**2.2 Label elements**

**Hazard pictograms**

:



**Signal word**

:

E.coli Poly A Polymerase	No signal word.
5X E.coli Poly A Polymerase Buffer	Warning
25 mM Manganese Chloride	No signal word.
10 mM rATP (pH 7.5) in Sterile Water	No signal word.
Glycogen	No signal word.
10X AffinityScript RT buffer	No signal word.
RT Adaptor Primer	No signal word.
100 mM dNTPs	No signal word.
AffinityScript RT/RNase Block Enzyme Mixture	No signal word.
Universal Reverse Primer	No signal word.
Reference Dye	No signal word.
20X EvaGreen PCR Enzyme Blend	No signal word.
20 mM dNTP Mix	No signal word.
10X Core PCR Buffer	No signal word.

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	50 mM Magnesium Chloride	No signal word.
<b>Hazard statements</b>	: E.coli Poly A Polymerase 5X E.coli Poly A Polymerase Buffer	No known significant effects or critical hazards. <b>GHS07 -</b>
	25 mM Manganese Chloride	Causes serious eye irritation. No known significant effects or critical hazards.
	10 mM rATP (pH 7.5) in Sterile Water	No known significant effects or critical hazards.
	Glycogen	No known significant effects or critical hazards.
	10X AffinityScript RT buffer	No known significant effects or critical hazards.
	RT Adaptor Primer	No known significant effects or critical hazards.
	100 mM dNTPs	No known significant effects or critical hazards.
	AffinityScript RT/RNase Block Enzyme Mixture	No known significant effects or critical hazards.
	Universal Reverse Primer	No known significant effects or critical hazards.
	Reference Dye	No known significant effects or critical hazards.
	20X EvaGreen	No known significant effects or critical hazards.
	PCR Enzyme Blend	No known significant effects or critical hazards.
	20 mM dNTP Mix	No known significant effects or critical hazards.
	10X Core PCR Buffer	No known significant effects or critical hazards.
	50 mM Magnesium Chloride	No known significant effects or critical hazards.
<b>Precautionary statements</b>		
<b>Prevention</b>		
	: E.coli Poly A Polymerase 5X E.coli Poly A Polymerase Buffer	Not applicable. P280 - Wear eye or face protection.
	25 mM Manganese Chloride	P264 - Wash hands thoroughly after handling. Not applicable.
	10 mM rATP (pH 7.5) in Sterile Water	Not applicable.
	Glycogen	Not applicable.
	10X AffinityScript RT buffer	Not applicable.
	RT Adaptor Primer	Not applicable.
	100 mM dNTPs	Not applicable.
	AffinityScript RT/RNase Block Enzyme Mixture	Not applicable.
	Universal Reverse Primer	Not applicable.
	Reference Dye	Not applicable.
	20X EvaGreen	Not applicable.
	PCR Enzyme Blend	Not applicable.
	20 mM dNTP Mix	Not applicable.
	10X Core PCR Buffer	Not applicable.
	50 mM Magnesium Chloride	Not applicable.
<b>Response</b>	: E.coli Poly A Polymerase 5X E.coli Poly A Polymerase Buffer	Not applicable. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	25 mM Manganese Chloride	Not applicable.
	10 mM rATP (pH 7.5) in Sterile Water	Not applicable.
	Glycogen	Not applicable.
	10X AffinityScript RT buffer	Not applicable.
	RT Adaptor Primer	Not applicable.

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	100 mM dNTPs	Not applicable.
	AffinityScript RT/RNase	Not applicable.
	Block Enzyme Mixture	
	Universal Reverse Primer	Not applicable.
	Reference Dye	Not applicable.
	20X EvaGreen	Not applicable.
	PCR Enzyme Blend	Not applicable.
	20 mM dNTP Mix	Not applicable.
	10X Core PCR Buffer	Not applicable.
	50 mM Magnesium Chloride	Not applicable.
<b>Storage</b>	: E.coli Poly A Polymerase	Not applicable.
	5X E.coli Poly A Polymerase Buffer	Not applicable.
	25 mM Manganese Chloride	Not applicable.
	10 mM rATP (pH 7.5) in Sterile Water	Not applicable.
	Glycogen	Not applicable.
	10X AffinityScript RT buffer	Not applicable.
	RT Adaptor Primer	Not applicable.
	100 mM dNTPs	Not applicable.
	AffinityScript RT/RNase	Not applicable.
	Block Enzyme Mixture	
	Universal Reverse Primer	Not applicable.
	Reference Dye	Not applicable.
	20X EvaGreen	Not applicable.
	PCR Enzyme Blend	Not applicable.
	20 mM dNTP Mix	Not applicable.
	10X Core PCR Buffer	Not applicable.
	50 mM Magnesium Chloride	Not applicable.
<b>Disposal</b>	: E.coli Poly A Polymerase	Not applicable.
	5X E.coli Poly A Polymerase Buffer	Not applicable.
	25 mM Manganese Chloride	Not applicable.
	10 mM rATP (pH 7.5) in Sterile Water	Not applicable.
	Glycogen	Not applicable.
	10X AffinityScript RT buffer	Not applicable.
	RT Adaptor Primer	Not applicable.
	100 mM dNTPs	Not applicable.
	AffinityScript RT/RNase	Not applicable.
	Block Enzyme Mixture	
	Universal Reverse Primer	Not applicable.
	Reference Dye	Not applicable.
	20X EvaGreen	Not applicable.
	PCR Enzyme Blend	Not applicable.
	20 mM dNTP Mix	Not applicable.
	10X Core PCR Buffer	Not applicable.
	50 mM Magnesium Chloride	Not applicable.
<b>Hazardous ingredients</b>	: No hazardous ingredient	

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<b>Supplemental label elements</b>	:	E.coli Poly A Polymerase	Safety data sheet available on request.
		5X E.coli Poly A Polymerase Buffer	Not applicable.
		25 mM Manganese Chloride	Not applicable.
		10 mM rATP (pH 7.5) in Sterile Water	Not applicable.
		Glycogen	Not applicable.
		10X AffinityScript RT buffer	Safety data sheet available on request.
		RT Adaptor Primer	Not applicable.
		100 mM dNTPs	Not applicable.
		AffinityScript RT/RNase Block Enzyme Mixture	Not applicable.
		Universal Reverse Primer	Not applicable.
		Reference Dye	Safety data sheet available on request.
		20X EvaGreen	Not applicable.
		PCR Enzyme Blend	Not applicable.
		20 mM dNTP Mix	Not applicable.
		10X Core PCR Buffer	Safety data sheet available on request.
		50 mM Magnesium Chloride	Not applicable.

<b>Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</b>	:	E.coli Poly A Polymerase	Not applicable.
		5X E.coli Poly A Polymerase Buffer	Not applicable.
		25 mM Manganese Chloride	Not applicable.
		10 mM rATP (pH 7.5) in Sterile Water	Not applicable.
		Glycogen	Not applicable.
		10X AffinityScript RT buffer	Not applicable.
		RT Adaptor Primer	Not applicable.
		100 mM dNTPs	Not applicable.
		AffinityScript RT/RNase Block Enzyme Mixture	Not applicable.
		Universal Reverse Primer	Not applicable.
		Reference Dye	Not applicable.
		20X EvaGreen	Not applicable.
		PCR Enzyme Blend	Not applicable.
		20 mM dNTP Mix	Not applicable.
		10X Core PCR Buffer	Not applicable.
		50 mM Magnesium Chloride	Not applicable.

### Special packaging requirements

<b>Tactile warning of danger</b>	:	E.coli Poly A Polymerase	Not applicable.
		5X E.coli Poly A Polymerase Buffer	Not applicable.
		25 mM Manganese Chloride	Not applicable.
		10 mM rATP (pH 7.5) in Sterile Water	Not applicable.
		Glycogen	Not applicable.
		10X AffinityScript RT buffer	Not applicable.
		RT Adaptor Primer	Not applicable.
		100 mM dNTPs	Not applicable.
		AffinityScript RT/RNase Block Enzyme Mixture	Not applicable.
		Universal Reverse Primer	Not applicable.
		Reference Dye	Not applicable.

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20X EvaGreen	Not applicable.
PCR Enzyme Blend	Not applicable.
20 mM dNTP Mix	Not applicable.
10X Core PCR Buffer	Not applicable.
50 mM Magnesium Chloride	Not applicable.

### 2.3 Other hazards

<b>Other hazards which do not result in classification</b>	:	E.coli Poly A Polymerase	None known.
		5X E.coli Poly A Polymerase Buffer	None known.
		25 mM Manganese Chloride	None known.
		10 mM rATP (pH 7.5) in Sterile Water	None known.
		Glycogen	None known.
		10X AffinityScript RT buffer	None known.
		RT Adaptor Primer	None known.
		100 mM dNTP Mix (25 mM each dNTP)	None known.
		AffinityScript RT/RNase Block Enzyme Mixture	None known.
		Universal Reverse Primer	None known.
		Reference Dye	None known.
		20X EvaGreen	None known.
		PCR Enzyme Blend	None known.
		20 mM dNTP Mix (5 mM each dNTP)	None known.
		10X Core PCR Buffer	None known.
		50 mM Magnesium Chloride	None known.

## SECTION 3: Composition/information on ingredients

<b>3.2 Mixtures</b>	:	E.coli Poly A Polymerase	Mixture
		5X E.coli Poly A Polymerase Buffer	Mixture
		25 mM Manganese Chloride	Mixture
		10 mM rATP (pH 7.5) in Sterile Water	Mixture
		Glycogen	Mixture
		10X AffinityScript RT buffer	Mixture
		RT Adaptor Primer	Mixture
		100 mM dNTPs	Mixture
		AffinityScript RT/RNase Block Enzyme Mixture	Mixture
		Universal Reverse Primer	Mixture
		Reference Dye	Mixture
		20X EvaGreen	Mixture
		PCR Enzyme Blend	Mixture
		20 mM dNTP Mix	Mixture
		10X Core PCR Buffer	Mixture
		50 mM Magnesium Chloride	Mixture



### SECTION 3: Composition/information on ingredients

Product/ingredient name	Identifiers	%	Classification	Type
<b>E.coli Poly A Polymerase</b> Glycerol	EC: 200-289-5 CAS: 56-81-5	≥50 - ≤75	Not classified.	[2]
Sodium chloride	EC: 231-598-3 CAS: 7647-14-5	≤3	Eye Irrit. 2, H319	[1]
<b>5X E.coli Poly A Polymerase Buffer</b> Sodium chloride	EC: 231-598-3 CAS: 7647-14-5	≤10	Eye Irrit. 2, H319	[1]
2-Amino-2-(hydroxymethyl) propane-1,3-diol hydrochloride	EC: 214-684-5 CAS: 1185-53-1	≤5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335	[1]
<b>10X AffinityScript RT buffer</b> 2-Amino-2-(hydroxymethyl) propane-1,3-diol hydrochloride	EC: 214-684-5 CAS: 1185-53-1	<10	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335	[1]
<b>AffinityScript RT/RNase Block Enzyme Mixture</b> Glycerol	EC: 200-289-5 CAS: 56-81-5	≥50 - ≤75	Not classified.	[2]
<b>Reference Dye</b> 2-Amino-2-(hydroxymethyl) propane-1,3-diol hydrochloride	EC: 214-684-5 CAS: 1185-53-1	≤3	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335	[1]
<b>PCR Enzyme Blend</b> Glycerol	EC: 200-289-5 CAS: 56-81-5	≥50 - ≤75	Not classified.	[2]
<b>10X Core PCR Buffer</b> 2-Amino-2-(hydroxymethyl) propane-1,3-diol hydrochloride	EC: 214-684-5 CAS: 1185-53-1	≤3	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335  <b>See Section 16 for the full text of the H statements declared above.</b>	[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.

#### Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures



**SECTION 4: First aid measures**

<b>Eye contact</b>	: E.coli Poly A Polymerase	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 E.coli Poly A Polymerase Buffer	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.
	25 mM Manganese Chloride	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 rATP (pH 7.5) in Sterile Water	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.
	Glycogen	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.
	10X AffinityScript RT 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.
	RT Adaptor 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.
	100 mM dNTPs	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 Enzyme Mixture	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.
	Universal Reverse 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.
	Reference Dye	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.
	20X EvaGreen	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.
	PCR Enzyme 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.
	20 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.
	10X Core PCR 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.
	50 mM Magnesium Chloride	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.
<b>Inhalation</b>	: E.coli Poly A Polymerase	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	5X E.coli Poly A Polymerase Buffer	Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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 adverse health effects persist or are severe. 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

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25 mM Manganese Chloride	surveillance for 48 hours. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
10 mM rATP (pH 7.5) in Sterile Water	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Glycogen	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
10X AffinityScript RT 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.
RT Adaptor Primer	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
100 mM dNTPs	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.
AffinityScript RT/RNase Block Enzyme Mixture	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Universal Reverse Primer	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Reference Dye	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.
20X EvaGreen	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
PCR Enzyme Blend	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
20 mM dNTP Mix	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
10X Core PCR 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.
50 mM Magnesium Chloride	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> : E.coli Poly A Polymerase	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
5X E.coli Poly A Polymerase Buffer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
25 mM Manganese Chloride	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if

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10 mM rATP (pH 7.5) in Sterile Water	symptoms occur. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Glycogen	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
10X AffinityScript RT buffer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
RT Adaptor Primer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
100 mM dNTPs	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
AffinityScript RT/RNase Block Enzyme Mixture	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Universal Reverse Primer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Reference Dye	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
20X EvaGreen	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
PCR Enzyme Blend	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
20 mM dNTP Mix	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
10X Core PCR Buffer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
50 mM Magnesium Chloride	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
<b>Ingestion</b> : E.coli Poly A Polymerase	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 E.coli Poly A Polymerase Buffer	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.
25 mM Manganese Chloride	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

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10 mM rATP (pH 7.5) in Sterile Water	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.
Glycogen	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.
10X AffinityScript RT 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.
RT Adaptor 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.
100 mM dNTPs	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 Enzyme Mixture	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.
Universal Reverse 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.
Reference Dye	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.
20X EvaGreen	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.
PCR Enzyme 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 water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
20 mM dNTP Mix	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If

**SECTION 4: First aid measures**

10X Core PCR Buffer	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. 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.
50 mM Magnesium Chloride	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.

**Protection of first-aiders** :

E.coli Poly A Polymerase	No action shall be taken involving any personal risk or without suitable training.
5X E.coli Poly A Polymerase Buffer	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
25 mM Manganese Chloride	No action shall be taken involving any personal risk or without suitable training.
10 mM rATP (pH 7.5) in Sterile Water	No action shall be taken involving any personal risk or without suitable training.
Glycogen	No action shall be taken involving any personal risk or without suitable training.
10X AffinityScript RT buffer	No action shall be taken involving any personal risk or without suitable training.
RT Adaptor Primer	No action shall be taken involving any personal risk or without suitable training.
100 mM dNTPs	No action shall be taken involving any personal risk or without suitable training.
AffinityScript RT/RNase Block Enzyme Mixture	No action shall be taken involving any personal risk or without suitable training.
Universal Reverse Primer	No action shall be taken involving any personal risk or without suitable training.
Reference Dye	No action shall be taken involving any personal risk or without suitable training.
20X EvaGreen	No action shall be taken involving any personal risk or without suitable training.
PCR Enzyme Blend	No action shall be taken involving any personal risk or without suitable training.
20 mM dNTP Mix	No action shall be taken involving any personal risk or without suitable training.
10X Core PCR Buffer	No action shall be taken involving any personal risk or without suitable training.
50 mM Magnesium Chloride	No action shall be taken involving any personal risk or without suitable training.

**4.2 Most important symptoms and effects, both acute and delayed**

Potential acute health effects

<b>Eye contact</b>	:	E.coli Poly A Polymerase	No known significant effects or critical hazards.
		5X E.coli Poly A Polymerase Buffer	Causes serious eye irritation.
		25 mM Manganese Chloride	No known significant effects or critical hazards.
		10 mM rATP (pH 7.5) in Sterile Water	No known significant effects or critical hazards.
		Glycogen	No known significant effects or critical hazards.
		10X AffinityScript RT buffer	No known significant effects or critical hazards.
		RT Adaptor Primer	No known significant effects or critical hazards.



**SECTION 4: First aid measures**

	100 mM dNTPs	No known significant effects or critical hazards.
	AffinityScript RT/RNase	No known significant effects or critical hazards.
	Block Enzyme Mixture	
	Universal Reverse	No known significant effects or critical hazards.
	Primer	
	Reference Dye	No known significant effects or critical hazards.
	20X EvaGreen	No known significant effects or critical hazards.
	PCR Enzyme Blend	No known significant effects or critical hazards.
	20 mM dNTP Mix	No known significant effects or critical hazards.
	10X Core PCR Buffer	No known significant effects or critical hazards.
	50 mM Magnesium	No known significant effects or critical hazards.
	Chloride	
<b>Inhalation</b>	: E.coli Poly A Polymerase	No known significant effects or critical hazards.
	5X E.coli Poly A	No known significant effects or critical hazards.
	Polymerase Buffer	
	25 mM Manganese	No known significant effects or critical hazards.
	Chloride	
	10 mM rATP (pH 7.5) in	No known significant effects or critical hazards.
	Sterile Water	
	Glycogen	No known significant effects or critical hazards.
	10X AffinityScript RT	No known significant effects or critical hazards.
	buffer	
	RT Adaptor Primer	No known significant effects or critical hazards.
	100 mM dNTPs	No known significant effects or critical hazards.
	AffinityScript RT/RNase	No known significant effects or critical hazards.
	Block Enzyme Mixture	
	Universal Reverse	No known significant effects or critical hazards.
	Primer	
	Reference Dye	No known significant effects or critical hazards.
	20X EvaGreen	No known significant effects or critical hazards.
	PCR Enzyme Blend	No known significant effects or critical hazards.
	20 mM dNTP Mix	No known significant effects or critical hazards.
	10X Core PCR Buffer	No known significant effects or critical hazards.
	50 mM Magnesium	No known significant effects or critical hazards.
	Chloride	
<b>Skin contact</b>	: E.coli Poly A Polymerase	No known significant effects or critical hazards.
	5X E.coli Poly A	No known significant effects or critical hazards.
	Polymerase Buffer	
	25 mM Manganese	No known significant effects or critical hazards.
	Chloride	
	10 mM rATP (pH 7.5) in	No known significant effects or critical hazards.
	Sterile Water	
	Glycogen	No known significant effects or critical hazards.
	10X AffinityScript RT	No known significant effects or critical hazards.
	buffer	
	RT Adaptor Primer	No known significant effects or critical hazards.
	100 mM dNTPs	No known significant effects or critical hazards.
	AffinityScript RT/RNase	No known significant effects or critical hazards.
	Block Enzyme Mixture	
	Universal Reverse	No known significant effects or critical hazards.
	Primer	
	Reference Dye	No known significant effects or critical hazards.
	20X EvaGreen	No known significant effects or critical hazards.
	PCR Enzyme Blend	No known significant effects or critical hazards.
	20 mM dNTP Mix	No known significant effects or critical hazards.
	10X Core PCR Buffer	No known significant effects or critical hazards.
	50 mM Magnesium	No known significant effects or critical hazards.
	Chloride	

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<b>Ingestion</b>	:	E.coli Poly A Polymerase	No known significant effects or critical hazards.
		5X E.coli Poly A	No known significant effects or critical hazards.
		Polymerase Buffer	
		25 mM Manganese Chloride	No known significant effects or critical hazards.
		10 mM rATP (pH 7.5) in Sterile Water	No known significant effects or critical hazards.
		Glycogen	No known significant effects or critical hazards.
		10X AffinityScript RT buffer	No known significant effects or critical hazards.
		RT Adaptor Primer	No known significant effects or critical hazards.
		100 mM dNTPs	No known significant effects or critical hazards.
		AffinityScript RT/RNase Block Enzyme Mixture	No known significant effects or critical hazards.
		Universal Reverse Primer	No known significant effects or critical hazards.
		Reference Dye	No known significant effects or critical hazards.
		20X EvaGreen	No known significant effects or critical hazards.
		PCR Enzyme Blend	No known significant effects or critical hazards.
		20 mM dNTP Mix	No known significant effects or critical hazards.
		10X Core PCR Buffer	No known significant effects or critical hazards.
		50 mM Magnesium Chloride	No known significant effects or critical hazards.

**Over-exposure signs/symptoms**

<b>Eye contact</b>	:	E.coli Poly A Polymerase	No specific data.
		5X E.coli Poly A	Adverse symptoms may include the following:  pain or irritation watering redness
		Polymerase Buffer	
		25 mM Manganese Chloride	
		10 mM rATP (pH 7.5) in Sterile Water	No specific data.
		Glycogen	No specific data.
		10X AffinityScript RT buffer	No specific data.
		RT Adaptor Primer	No specific data.
		100 mM dNTPs	No specific data.
		AffinityScript RT/RNase Block Enzyme Mixture	No specific data.
		Universal Reverse Primer	No specific data.
		Reference Dye	No specific data.
		20X EvaGreen	No specific data.
		PCR Enzyme Blend	No specific data.
		20 mM dNTP Mix	No specific data.
		10X Core PCR Buffer	No specific data.
		50 mM Magnesium Chloride	No specific data.

<b>Inhalation</b>	:	E.coli Poly A Polymerase	No specific data.
		5X E.coli Poly A	No specific data.
		Polymerase Buffer	
		25 mM Manganese Chloride	No specific data.
		10 mM rATP (pH 7.5) in Sterile Water	No specific data.
		Glycogen	No specific data.
		10X AffinityScript RT buffer	No specific data.
		RT Adaptor Primer	No specific data.
		100 mM dNTPs	No specific data.
		AffinityScript RT/RNase Block Enzyme Mixture	No specific data.



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	Universal Reverse Primer	No specific data.
	Reference Dye	No specific data.
	20X EvaGreen	No specific data.
	PCR Enzyme Blend	No specific data.
	20 mM dNTP Mix	No specific data.
	10X Core PCR Buffer	No specific data.
	50 mM Magnesium Chloride	No specific data.
<b>Skin contact</b>	: E.coli Poly A Polymerase	No specific data.
	5X E.coli Poly A Polymerase Buffer	No specific data.
	25 mM Manganese Chloride	No specific data.
	10 mM rATP (pH 7.5) in Sterile Water	No specific data.
	Glycogen	No specific data.
	10X AffinityScript RT buffer	No specific data.
	RT Adaptor Primer	No specific data.
	100 mM dNTPs	No specific data.
	AffinityScript RT/RNase Block Enzyme Mixture	No specific data.
	Universal Reverse Primer	No specific data.
	Reference Dye	No specific data.
	20X EvaGreen	No specific data.
	PCR Enzyme Blend	No specific data.
	20 mM dNTP Mix	No specific data.
	10X Core PCR Buffer	No specific data.
	50 mM Magnesium Chloride	No specific data.
<b>Ingestion</b>	: E.coli Poly A Polymerase	No specific data.
	5X E.coli Poly A Polymerase Buffer	No specific data.
	25 mM Manganese Chloride	No specific data.
	10 mM rATP (pH 7.5) in Sterile Water	No specific data.
	Glycogen	No specific data.
	10X AffinityScript RT buffer	No specific data.
	RT Adaptor Primer	No specific data.
	100 mM dNTPs	No specific data.
	AffinityScript RT/RNase Block Enzyme Mixture	No specific data.
	Universal Reverse Primer	No specific data.
	Reference Dye	No specific data.
	20X EvaGreen	No specific data.
	PCR Enzyme Blend	No specific data.
	20 mM dNTP Mix	No specific data.
	10X Core PCR Buffer	No specific data.
	50 mM Magnesium Chloride	No specific data.

**4.3 Indication of any immediate medical attention and special treatment needed**

**SECTION 4: First aid measures**

<b>Notes to physician</b>	: E.coli Poly A Polymerase	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	5X E.coli Poly A Polymerase 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.
	25 mM Manganese Chloride 10 mM rATP (pH 7.5) in Sterile Water Glycogen	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	10X AffinityScript RT buffer	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	RT Adaptor Primer	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.
	100 mM dNTPs	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	AffinityScript RT/RNase Block Enzyme Mixture Universal Reverse Primer Reference Dye	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.
	20X EvaGreen	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	PCR Enzyme Blend	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	20 mM dNTP Mix	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	10X Core PCR 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.
	50 mM Magnesium Chloride	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
<b>Specific treatments</b>	: E.coli Poly A Polymerase	No specific treatment.
	5X E.coli Poly A Polymerase Buffer	No specific treatment.
	25 mM Manganese Chloride	No specific treatment.
	10 mM rATP (pH 7.5) in Sterile Water Glycogen	No specific treatment.
	10X AffinityScript RT buffer	No specific treatment.
	RT Adaptor Primer	No specific treatment.
	100 mM dNTPs	No specific treatment.
	AffinityScript RT/RNase Block Enzyme Mixture	No specific treatment.
	Universal Reverse Primer	No specific treatment.
	Reference Dye	No specific treatment.
	20X EvaGreen	No specific treatment.
	PCR Enzyme Blend	No specific treatment.
	20 mM dNTP Mix	No specific treatment.
	10X Core PCR Buffer	No specific treatment.
	50 mM Magnesium	No specific treatment.
	Chloride	No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

<b>Suitable extinguishing media</b>	: E.coli Poly A Polymerase	Use an extinguishing agent suitable for the surrounding fire.	
	5X E.coli Poly A Polymerase Buffer	Use an extinguishing agent suitable for the surrounding fire.	
	25 mM Manganese Chloride	Use an extinguishing agent suitable for the surrounding fire.	
	10 mM rATP (pH 7.5) in Sterile Water	Use an extinguishing agent suitable for the surrounding fire.	
	Glycogen	Use an extinguishing agent suitable for the surrounding fire.	
	10X AffinityScript RT buffer	Use an extinguishing agent suitable for the surrounding fire.	
	RT Adaptor Primer	Use an extinguishing agent suitable for the surrounding fire.	
	100 mM dNTPs	Use an extinguishing agent suitable for the surrounding fire.	
	AffinityScript RT/RNase Block Enzyme Mixture	Use an extinguishing agent suitable for the surrounding fire.	
	Universal Reverse Primer	Use an extinguishing agent suitable for the surrounding fire.	
	Reference Dye	Use an extinguishing agent suitable for the surrounding fire.	
	20X EvaGreen	Use an extinguishing agent suitable for the surrounding fire.	
	PCR Enzyme Blend	Use an extinguishing agent suitable for the surrounding fire.	
	20 mM dNTP Mix	Use an extinguishing agent suitable for the surrounding fire.	
	10X Core PCR Buffer	Use an extinguishing agent suitable for the surrounding fire.	
	50 mM Magnesium Chloride	Use an extinguishing agent suitable for the surrounding fire.	
	<b>Unsuitable extinguishing media</b>	: E.coli Poly A Polymerase	None known.
		5X E.coli Poly A Polymerase Buffer	None known.
		25 mM Manganese Chloride	None known.
10 mM rATP (pH 7.5) in Sterile Water		None known.	
Glycogen		None known.	
10X AffinityScript RT buffer		None known.	
RT Adaptor Primer		None known.	
100 mM dNTPs		None known.	
AffinityScript RT/RNase Block Enzyme Mixture		None known.	
Universal Reverse Primer		None known.	
Reference Dye		None known.	
20X EvaGreen		None known.	
PCR Enzyme Blend		None known.	
20 mM dNTP Mix		None known.	
10X Core PCR Buffer		None known.	
50 mM Magnesium Chloride		None known.	

### 5.2 Special hazards arising from the substance or mixture

<b>Hazards from the substance or mixture</b>	: E.coli Poly A Polymerase	In a fire or if heated, a pressure increase will occur and the container may burst.
	5X E.coli Poly A Polymerase Buffer	In a fire or if heated, a pressure increase will occur and the container may burst.
	25 mM Manganese Chloride	In a fire or if heated, a pressure increase will occur and the container may burst.
	10 mM rATP (pH 7.5) in Sterile Water	In a fire or if heated, a pressure increase will occur and the container may burst.
	Glycogen	In a fire or if heated, a pressure increase will occur and the container may burst.
	10X AffinityScript RT buffer	In a fire or if heated, a pressure increase will occur and the container may burst.
	RT Adaptor Primer	In a fire or if heated, a pressure increase will occur and the

**SECTION 5: Firefighting measures**

**Hazardous combustion products**

100 mM dNTPs	container may burst. In a fire or if heated, a pressure increase will occur and the container may burst.
AffinityScript RT/RNase Block Enzyme Mixture	In a fire or if heated, a pressure increase will occur and the container may burst.
Universal Reverse Primer	In a fire or if heated, a pressure increase will occur and the container may burst.
Reference Dye	In a fire or if heated, a pressure increase will occur and the container may burst.
20X EvaGreen	In a fire or if heated, a pressure increase will occur and the container may burst.
PCR Enzyme Blend	In a fire or if heated, a pressure increase will occur and the container may burst.
20 mM dNTP Mix	In a fire or if heated, a pressure increase will occur and the container may burst.
10X Core PCR Buffer	In a fire or if heated, a pressure increase will occur and the container may burst.
50 mM Magnesium Chloride	In a fire or if heated, a pressure increase will occur and the container may burst.
: E.coli Poly A Polymerase	Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds metal oxide/oxides
5X E.coli Poly A Polymerase Buffer	Decomposition products may include the following materials:  carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides
25 mM Manganese Chloride	No specific data.
10 mM rATP (pH 7.5) in Sterile Water	No specific data.
Glycogen	Decomposition products may include the following materials: carbon dioxide carbon monoxide
10X AffinityScript RT buffer	Decomposition products may include the following materials:  carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides
RT Adaptor Primer	No specific data.
100 mM dNTPs	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides phosphorus oxides
AffinityScript RT/RNase Block Enzyme Mixture	Decomposition products may include the following materials:  carbon dioxide carbon monoxide
Universal Reverse Primer	No specific data.
Reference Dye	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides
20X EvaGreen	No specific data.

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PCR Enzyme Blend	Decomposition products may include the following materials: carbon dioxide carbon monoxide
20 mM dNTP Mix	No specific data.
10X Core PCR Buffer	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides
50 mM Magnesium Chloride	Decomposition products may include the following materials:  halogenated compounds metal oxide/oxides

**5.3 Advice for firefighters**

**Special precautions for fire-fighters**

: E.coli Poly A Polymerase	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 E.coli Poly A Polymerase 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.
25 mM Manganese Chloride	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 rATP (pH 7.5) in Sterile 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.
Glycogen	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.
10X AffinityScript RT 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.
RT Adaptor 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.
100 mM dNTPs	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 Enzyme Mixture	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.
Universal Reverse 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.
Reference Dye	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.
20X EvaGreen	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.
PCR Enzyme 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.
20 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.
10X Core PCR 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.
50 mM Magnesium Chloride	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be



**SECTION 5: Firefighting measures****Special protective equipment for fire-fighters**

: E.coli Poly A Polymerase	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
5X E.coli Poly A Polymerase Buffer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
25 mM Manganese Chloride	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
10 mM rATP (pH 7.5) in Sterile Water	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
Glycogen	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
10X AffinityScript RT buffer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
RT Adaptor Primer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
100 mM dNTPs	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
AffinityScript RT/RNase Block Enzyme Mixture	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
Universal Reverse Primer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
Reference Dye	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for

## SECTION 5: Firefighting measures

20X EvaGreen	fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
PCR Enzyme Blend	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
20 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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
10X Core PCR Buffer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
50 mM Magnesium Chloride	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

<b>For non-emergency personnel</b>	: E.coli Poly A Polymerase	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 E.coli Poly A Polymerase 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. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
	25 mM Manganese Chloride	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 rATP (pH 7.5) in Sterile 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.
	Glycogen	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**

10X AffinityScript RT 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.
RT Adaptor 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.
100 mM dNTPs	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.
AffinityScript RT/RNase Block Enzyme Mixture	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.
Universal Reverse 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.
Reference Dye	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.
20X EvaGreen	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.
PCR Enzyme 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.
20 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.
10X Core PCR 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.
50 mM Magnesium Chloride	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.
<b>For emergency responders</b> : E.coli Poly A Polymerase	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 E.coli Poly A Polymerase 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".
25 mM Manganese	If specialised clothing is required to deal with the spillage,

**SECTION 6: Accidental release measures**

Chloride	take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
10 mM rATP (pH 7.5) in Sterile Water	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".
Glycogen	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".
10X AffinityScript RT 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".
RT Adaptor 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".
100 mM dNTPs	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 Enzyme Mixture	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".
Universal Reverse 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".
Reference Dye	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".
20X EvaGreen	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".
PCR Enzyme Blend	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".
20 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".
10X Core PCR 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".
50 mM Magnesium Chloride	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".

**6.2 Environmental precautions**

: E.coli Poly A Polymerase	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 E.coli Poly A Polymerase 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).

**SECTION 6: Accidental release measures**

25 mM Manganese Chloride	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 rATP (pH 7.5) in Sterile 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).
Glycogen	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).
10X AffinityScript RT 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).
RT Adaptor 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).
100 mM dNTPs	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 Enzyme Mixture	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).
Universal Reverse 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).
Reference Dye	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).
20X EvaGreen	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).
PCR Enzyme 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).
20 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).
10X Core PCR 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).
50 mM Magnesium Chloride	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).

**6.3 Methods and material for containment and cleaning up**

**SECTION 6: Accidental release measures**

<b>Methods for cleaning up</b>	: E.coli Poly A Polymerase	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 E.coli Poly A Polymerase 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.
	25 mM Manganese Chloride	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 rATP (pH 7.5) in Sterile 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.
	Glycogen	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.
	10X AffinityScript RT 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.
	RT Adaptor 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.
	100 mM dNTPs	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 Enzyme Mixture	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.
	Universal Reverse 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.
	Reference Dye	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.
	20X EvaGreen	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.
	PCR Enzyme 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.

## SECTION 6: Accidental release measures

20 mM dNTP Mix	of via a licensed waste disposal contractor. 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.
10X Core PCR 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.
50 mM Magnesium Chloride	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.

**6.4 Reference to other sections** : See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

<b>Protective measures</b>	: E.coli Poly A Polymerase	Put on appropriate personal protective equipment (see Section 8).
5X E.coli Poly A Polymerase Buffer		Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. 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.
25 mM Manganese Chloride		Put on appropriate personal protective equipment (see Section 8).
10 mM rATP (pH 7.5) in Sterile Water		Put on appropriate personal protective equipment (see Section 8).
Glycogen		Put on appropriate personal protective equipment (see Section 8).
10X AffinityScript RT buffer		Put on appropriate personal protective equipment (see Section 8).
RT Adaptor Primer		Put on appropriate personal protective equipment (see Section 8).
100 mM dNTPs		Put on appropriate personal protective equipment (see Section 8).
AffinityScript RT/RNase Block Enzyme Mixture		Put on appropriate personal protective equipment (see Section 8).
Universal Reverse Primer		Put on appropriate personal protective equipment (see Section 8).
Reference Dye		Put on appropriate personal protective equipment (see Section 8).
20X EvaGreen		Put on appropriate personal protective equipment (see Section 8).
PCR Enzyme Blend		Put on appropriate personal protective equipment (see Section 8).
20 mM dNTP Mix		Put on appropriate personal protective equipment (see Section 8).
10X Core PCR Buffer		Put on appropriate personal protective equipment (see Section 8).
50 mM Magnesium Chloride		Put on appropriate personal protective equipment (see Section 8).



**SECTION 7: Handling and storage****Advice on general occupational hygiene**

E.coli Poly A Polymerase	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 E.coli Poly A Polymerase 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.
25 mM Manganese Chloride	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 rATP (pH 7.5) in Sterile 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.
Glycogen	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.
10X AffinityScript RT 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.
RT Adaptor 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.
100 mM dNTP Mix (25 mM each dNTP)	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 Enzyme Mixture	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.
Universal Reverse 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.
Reference Dye	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

**SECTION 7: Handling and storage**

20X EvaGreen	<p>protective equipment before entering eating areas. See also Section 8 for 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.</p>
PCR Enzyme Blend	<p>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.</p>
20 mM dNTP Mix (5 mM each dNTP)	<p>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.</p>
10X Core PCR Buffer	<p>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.</p>
50 mM Magnesium Chloride	<p>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.</p>
: E.coli Poly A Polymerase	<p>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.</p>
5X E.coli Poly A Polymerase Buffer	<p>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.</p>
25 mM Manganese Chloride	<p>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.</p>
10 mM rATP (pH 7.5) in Sterile Water	<p>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</p>

**7.2 Conditions for safe storage, including any incompatibilities**



**SECTION 7: Handling and storage**

	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.
Glycogen	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.
10X AffinityScript RT 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.
RT Adaptor 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.
100 mM dNTPs	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 Enzyme Mixture	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.
Universal Reverse 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.
Reference Dye	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

**SECTION 7: Handling and storage**

20X EvaGreen	prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. 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.
PCR Enzyme 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.
20 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.
10X Core PCR 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.
50 mM Magnesium Chloride	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.

**7.3 Specific end use(s)**

**Recommendations**

: E.coli Poly A Polymerase	Industrial applications, Professional applications.
5X E.coli Poly A Polymerase Buffer	Industrial applications, Professional applications.
25 mM Manganese Chloride	Industrial applications, Professional applications.
10 mM rATP (pH 7.5) in Sterile Water	Industrial applications, Professional applications.
Glycogen	Industrial applications, Professional applications.
10X AffinityScript RT buffer	Industrial applications, Professional applications.
RT Adaptor Primer	Industrial applications, Professional applications.
100 mM dNTPs	Industrial applications, Professional applications.
AffinityScript RT/RNase Block Enzyme Mixture	Industrial applications, Professional applications.

## SECTION 7: Handling and storage

	Universal Reverse Primer	Industrial applications, Professional applications.
	Reference Dye	Industrial applications, Professional applications.
	20X EvaGreen	Industrial applications, Professional applications.
	PCR Enzyme Blend	Industrial applications, Professional applications.
	20 mM dNTP Mix	Industrial applications, Professional applications.
	10X Core PCR Buffer	Industrial applications, Professional applications.
	50 mM Magnesium Chloride	Industrial applications, Professional applications.
<b>Industrial sector specific solutions</b>	E.coli Poly A Polymerase	Not applicable.
	5X E.coli Poly A Polymerase Buffer	Not applicable.
	25 mM Manganese Chloride	Not applicable.
	10 mM rATP (pH 7.5) in Sterile Water	Not applicable.
	Glycogen	Not applicable.
	10X AffinityScript RT buffer	Not applicable.
	RT Adaptor Primer	Not applicable.
	100 mM dNTPs	Not applicable.
	AffinityScript RT/RNase Block Enzyme Mixture	Not applicable.
	Universal Reverse Primer	Not applicable.
	Reference Dye	Not applicable.
	20X EvaGreen	Not applicable.
	PCR Enzyme Blend	Not applicable.
	20 mM dNTP Mix	Not applicable.
	10X Core PCR Buffer	Not applicable.
	50 mM Magnesium Chloride	Not applicable.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

Product/ingredient name	Exposure limit values
<b>E.coli Poly A Polymerase</b> Glycerol	<b>EH40/2005 WELs (United Kingdom (UK), 12/2011).</b> TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Mist
<b>AffinityScript RT/RNase Block Enzyme Mixture</b> Glycerol	<b>EH40/2005 WELs (United Kingdom (UK), 12/2011).</b> TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Mist
<b>PCR Enzyme Blend</b> Glycerol	<b>EH40/2005 WELs (United Kingdom (UK), 12/2011).</b> TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Mist

**Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for

## SECTION 8: Exposure controls/personal protection

methods for the determination of hazardous substances will also be required.

### DNELs/DMELs

No DNELs/DMELs available.

### PNECs

No PNECs available

## 8.2 Exposure controls

**Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

### 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.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

<b>Physical state</b>	: E.coli Poly A Polymerase	Liquid.
	5X E.coli Poly A Polymerase Buffer	Liquid.
	25 mM Manganese Chloride	Liquid.
	10 mM rATP (pH 7.5) in Sterile Water	Liquid.
	Glycogen	Liquid.
	10X AffinityScript RT buffer	Liquid.
	RT Adaptor Primer	Liquid.

**SECTION 9: Physical and chemical properties**

	100 mM dNTP Mix (25 mM each dNTP)	Liquid.
	AffinityScript RT/RNase Block Enzyme Mixture	Liquid.
	Universal Reverse Primer	Liquid.
	Reference Dye	Liquid.
	20X EvaGreen	Liquid.
	PCR Enzyme Blend	Liquid.
	20 mM dNTP Mix (5 mM each dNTP)	Liquid.
	10X Core PCR Buffer	Liquid.
	50 mM Magnesium Chloride	Liquid.
<b>Colour</b>	: E.coli Poly A Polymerase	Not available.
	5X E.coli Poly A Polymerase Buffer	Not available.
	25 mM Manganese Chloride	Not available.
	10 mM rATP (pH 7.5) in Sterile Water	Not available.
	Glycogen	Not available.
	10X AffinityScript RT buffer	Not available.
	RT Adaptor Primer	Not available.
	100 mM dNTPs	Not available.
	AffinityScript RT/RNase Block Enzyme Mixture	Not available.
	Universal Reverse Primer	Not available.
	Reference Dye	Not available.
	20X EvaGreen	Not available.
	PCR Enzyme Blend	Not available.
	20 mM dNTP Mix	Not available.
	10X Core PCR Buffer	Not available.
	50 mM Magnesium Chloride	Not available.
<b>Odour</b>	: E.coli Poly A Polymerase	Not available.
	5X E.coli Poly A Polymerase Buffer	Not available.
	25 mM Manganese Chloride	Not available.
	10 mM rATP (pH 7.5) in Sterile Water	Not available.
	Glycogen	Not available.
	10X AffinityScript RT buffer	Not available.
	RT Adaptor Primer	Not available.
	100 mM dNTPs	Not available.
	AffinityScript RT/RNase Block Enzyme Mixture	Not available.
	Universal Reverse Primer	Not available.
	Reference Dye	Not available.
	20X EvaGreen	Not available.
	PCR Enzyme Blend	Not available.
	20 mM dNTP Mix	Not available.
	10X Core PCR Buffer	Not available.
	50 mM Magnesium Chloride	Not available.

**SECTION 9: Physical and chemical properties**

<b>Odour threshold</b>	:	E.coli Poly A Polymerase	Not available.	
		5X E.coli Poly A Polymerase Buffer	Not available.	
		25 mM Manganese Chloride	Not available.	
		10 mM rATP (pH 7.5) in Sterile Water	Not available.	
		Glycogen	Not available.	
		10X AffinityScript RT buffer	Not available.	
		RT Adaptor Primer	Not available.	
		100 mM dNTPs	Not available.	
		AffinityScript RT/RNase Block Enzyme Mixture	Not available.	
		Universal Reverse Primer	Not available.	
		Reference Dye	Not available.	
		20X EvaGreen	Not available.	
		PCR Enzyme Blend	Not available.	
		20 mM dNTP Mix	Not available.	
		10X Core PCR Buffer	Not available.	
		50 mM Magnesium Chloride	Not available.	
	<b>pH</b>	:	E.coli Poly A Polymerase	8
			5X E.coli Poly A Polymerase Buffer	8
			25 mM Manganese Chloride	Not available.
			10 mM rATP (pH 7.5) in Sterile Water	7
		Glycogen	Not available.	
		10X AffinityScript RT buffer	8.3	
		RT Adaptor Primer	7.5	
		100 mM dNTP Mix (25 mM each dNTP)	7.5	
		AffinityScript RT/RNase Block Enzyme Mixture	8	
		Universal Reverse Primer	Not available.	
		Reference Dye	8	
		20X EvaGreen	Not available.	
		PCR Enzyme Blend	8	
		20 mM dNTP Mix (5 mM each dNTP)	7.5	
		10X Core PCR Buffer	8	
		50 mM Magnesium Chloride	Not available.	
<b>Melting point/freezing point</b>		:	E.coli Poly A Polymerase	Not available.
			5X E.coli Poly A Polymerase Buffer	Not available.
			25 mM Manganese Chloride	0°C
			10 mM rATP (pH 7.5) in Sterile Water	0°C
		Glycogen	0°C	
		10X AffinityScript RT buffer	Not available.	
		RT Adaptor Primer	0°C	
		100 mM dNTPs	Not available.	
		AffinityScript RT/RNase	Not available.	



**SECTION 9: Physical and chemical properties**

	Block Enzyme Mixture	
	Universal Reverse	0°C
	Primer	
	Reference Dye	0°C
	20X EvaGreen	0°C
	PCR Enzyme Blend	Not available.
	20 mM dNTP Mix	0°C
	10X Core PCR Buffer	Not available.
	50 mM Magnesium	0°C
	Chloride	
<b>Initial boiling point and boiling range</b>	: E.coli Poly A	Not available.
	Polymerase	
	5X E.coli Poly A	Not available.
	Polymerase Buffer	
	25 mM Manganese	100°C
	Chloride	
	10 mM rATP (pH 7.5) in	100°C
	Sterile Water	
	Glycogen	100°C
	10X AffinityScript RT	Not available.
	buffer	
	RT Adaptor Primer	100°C
	100 mM dNTPs	Not available.
	AffinityScript RT/RNase	Not available.
	Block Enzyme Mixture	
	Universal Reverse	100°C
	Primer	
	Reference Dye	100°C
	20X EvaGreen	100°C
	PCR Enzyme Blend	Not available.
	20 mM dNTP Mix	100°C
	10X Core PCR Buffer	Not available.
	50 mM Magnesium	100°C
	Chloride	
<b>Flash point</b>	: E.coli Poly A	Not available.
	Polymerase	
	5X E.coli Poly A	Not available.
	Polymerase Buffer	
	25 mM Manganese	Not available.
	Chloride	
	10 mM rATP (pH 7.5) in	Not available.
	Sterile Water	
	Glycogen	Not available.
	10X AffinityScript RT	Not available.
	buffer	
	RT Adaptor Primer	Not available.
	100 mM dNTPs	Not available.
	AffinityScript RT/RNase	Not available.
	Block Enzyme Mixture	
	Universal Reverse	Not available.
	Primer	
	Reference Dye	Not available.
	20X EvaGreen	Not available.
	PCR Enzyme Blend	Not available.
	20 mM dNTP Mix	Not available.
	10X Core PCR Buffer	Not available.
	50 mM Magnesium	Not available.
	Chloride	



**SECTION 9: Physical and chemical properties**

<b>Evaporation rate</b>	:	E.coli Poly A Polymerase	Not available.	
		5X E.coli Poly A Polymerase Buffer	Not available.	
		25 mM Manganese Chloride	Not available.	
		10 mM rATP (pH 7.5) in Sterile Water	Not available.	
		Glycogen	Not available.	
		10X AffinityScript RT buffer	Not available.	
		RT Adaptor Primer	Not available.	
		100 mM dNTPs	Not available.	
		AffinityScript RT/RNase Block Enzyme Mixture	Not available.	
		Universal Reverse Primer	Not available.	
		Reference Dye	Not available.	
		20X EvaGreen	Not available.	
		PCR Enzyme Blend	Not available.	
		20 mM dNTP Mix	Not available.	
		10X Core PCR Buffer	Not available.	
		50 mM Magnesium Chloride	Not available.	
	<b>Flammability (solid, gas)</b>	:	E.coli Poly A Polymerase	Not applicable.
			5X E.coli Poly A Polymerase Buffer	Not applicable.
			25 mM Manganese Chloride	Not applicable.
			10 mM rATP (pH 7.5) in Sterile Water	Not applicable.
			Glycogen	Not applicable.
			10X AffinityScript RT buffer	Not applicable.
			RT Adaptor Primer	Not applicable.
			100 mM dNTPs	Not applicable.
		AffinityScript RT/RNase Block Enzyme Mixture	Not applicable.	
		Universal Reverse Primer	Not applicable.	
		Reference Dye	Not applicable.	
		20X EvaGreen	Not applicable.	
		PCR Enzyme Blend	Not applicable.	
		20 mM dNTP Mix	Not applicable.	
		10X Core PCR Buffer	Not applicable.	
		50 mM Magnesium Chloride	Not applicable.	
<b>Upper/lower flammability or explosive limits</b>		:	E.coli Poly A Polymerase	Not available.
			5X E.coli Poly A Polymerase Buffer	Not available.
			25 mM Manganese Chloride	Not available.
			10 mM rATP (pH 7.5) in Sterile Water	Not available.
			Glycogen	Not available.
			10X AffinityScript RT buffer	Not available.
			RT Adaptor Primer	Not available.
			100 mM dNTP Mix (25 mM each dNTP)	Not available.
		AffinityScript RT/RNase	Not available.	

**SECTION 9: Physical and chemical properties**

	Block Enzyme Mixture	
	Universal Reverse	Not available.
	Primer	
	Reference Dye	Not available.
	20X EvaGreen	Not available.
	PCR Enzyme Blend	Not available.
	20 mM dNTP Mix (5	Not available.
	mM each dNTP)	
	10X Core PCR Buffer	Not available.
	50 mM Magnesium	Not available.
	Chloride	
<b>Vapour pressure</b>	: E.coli Poly A	Not available.
	Polymerase	
	5X E.coli Poly A	Not available.
	Polymerase Buffer	
	25 mM Manganese	Not available.
	Chloride	
	10 mM rATP (pH 7.5) in	Not available.
	Sterile Water	
	Glycogen	Not available.
	10X AffinityScript RT	Not available.
	buffer	
	RT Adaptor Primer	Not available.
	100 mM dNTPs	Not available.
	AffinityScript RT/RNase	Not available.
	Block Enzyme Mixture	
	Universal Reverse	Not available.
	Primer	
	Reference Dye	Not available.
	20X EvaGreen	Not available.
	PCR Enzyme Blend	Not available.
	20 mM dNTP Mix	Not available.
	10X Core PCR Buffer	Not available.
	50 mM Magnesium	Not available.
	Chloride	
<b>Vapour density</b>	: E.coli Poly A	Not available.
	Polymerase	
	5X E.coli Poly A	Not available.
	Polymerase Buffer	
	25 mM Manganese	Not available.
	Chloride	
	10 mM rATP (pH 7.5) in	Not available.
	Sterile Water	
	Glycogen	Not available.
	10X AffinityScript RT	Not available.
	buffer	
	RT Adaptor Primer	Not available.
	100 mM dNTPs	Not available.
	AffinityScript RT/RNase	Not available.
	Block Enzyme Mixture	
	Universal Reverse	Not available.
	Primer	
	Reference Dye	Not available.
	20X EvaGreen	Not available.
	PCR Enzyme Blend	Not available.
	20 mM dNTP Mix	Not available.
	10X Core PCR Buffer	Not available.
	50 mM Magnesium	Not available.
	Chloride	

**SECTION 9: Physical and chemical properties**

<b>Relative density</b>	:	E.coli Poly A Polymerase	Not available.		
		5X E.coli Poly A Polymerase Buffer	Not available.		
		25 mM Manganese Chloride	Not available.		
		10 mM rATP (pH 7.5) in Sterile Water	Not available.		
		Glycogen	Not available.		
		10X AffinityScript RT buffer	Not available.		
		RT Adaptor Primer	Not available.		
		100 mM dNTPs	Not available.		
		AffinityScript RT/RNase Block Enzyme Mixture	Not available.		
		Universal Reverse Primer	Not available.		
		Reference Dye	Not available.		
		20X EvaGreen	1		
		PCR Enzyme Blend	Not available.		
		20 mM dNTP Mix	1		
		10X Core PCR Buffer	Not available.		
		50 mM Magnesium Chloride	Not available.		
		<b>Solubility(ies)</b>	:	E.coli Poly A Polymerase	Soluble in the following materials: cold water and hot water.
				5X E.coli Poly A Polymerase Buffer	Easily soluble in the following materials: cold water and hot water.
				25 mM Manganese Chloride	Easily soluble in the following materials: cold water and hot water.
				10 mM rATP (pH 7.5) in Sterile Water	Easily soluble in the following materials: cold water and hot water.
Glycogen	Easily soluble in the following materials: cold water and hot water.				
10X AffinityScript RT buffer	Easily soluble in the following materials: cold water and hot water.				
RT Adaptor Primer	Easily soluble in the following materials: cold water and hot water.				
100 mM dNTPs	Easily soluble in the following materials: cold water and hot water.				
AffinityScript RT/RNase Block Enzyme Mixture	Soluble in the following materials: cold water and hot water.				
Universal Reverse Primer	Easily soluble in the following materials: cold water and hot water.				
Reference Dye	Easily soluble in the following materials: cold water and hot water.				
20X EvaGreen	Easily soluble in the following materials: cold water and hot water.				
PCR Enzyme Blend	Soluble in the following materials: cold water and hot water.				
20 mM dNTP Mix	Not available.				
10X Core PCR Buffer	Easily soluble in the following materials: cold water and hot water.				
50 mM Magnesium Chloride	Easily soluble in the following materials: cold water and hot water.				
<b>Partition coefficient: n-octanol/water</b>	:			E.coli Poly A Polymerase	Not available.
				5X E.coli Poly A Polymerase Buffer	Not available.
				25 mM Manganese Chloride	Not available.
				10 mM rATP (pH 7.5) in Sterile Water	Not available.
		Glycogen	Not available.		

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	10X AffinityScript RT buffer	Not available.
	RT Adaptor Primer	Not available.
	100 mM dNTPs	Not available.
	AffinityScript RT/RNase	Not available.
	Block Enzyme Mixture	
	Universal Reverse Primer	Not available.
	Reference Dye	Not available.
	20X EvaGreen	Not available.
	PCR Enzyme Blend	Not available.
	20 mM dNTP Mix	Not available.
	10X Core PCR Buffer	Not available.
	50 mM Magnesium Chloride	Not available.
<b>Auto-ignition temperature</b>	: E.coli Poly A Polymerase	Not available.
	5X E.coli Poly A Polymerase Buffer	Not available.
	25 mM Manganese Chloride	Not available.
	10 mM rATP (pH 7.5) in Sterile Water	Not available.
	Glycogen	Not available.
	10X AffinityScript RT buffer	Not available.
	RT Adaptor Primer	Not available.
	100 mM dNTPs	Not available.
	AffinityScript RT/RNase	Not available.
	Block Enzyme Mixture	
	Universal Reverse Primer	Not available.
	Reference Dye	Not available.
	20X EvaGreen	Not available.
	PCR Enzyme Blend	Not available.
	20 mM dNTP Mix	Not available.
	10X Core PCR Buffer	Not available.
	50 mM Magnesium Chloride	Not available.
<b>Decomposition temperature</b>	: E.coli Poly A Polymerase	Not available.
	5X E.coli Poly A Polymerase Buffer	Not available.
	25 mM Manganese Chloride	Not available.
	10 mM rATP (pH 7.5) in Sterile Water	Not available.
	Glycogen	Not available.
	10X AffinityScript RT buffer	Not available.
	RT Adaptor Primer	Not available.
	100 mM dNTPs	Not available.
	AffinityScript RT/RNase	Not available.
	Block Enzyme Mixture	
	Universal Reverse Primer	Not available.
	Reference Dye	Not available.
	20X EvaGreen	Not available.
	PCR Enzyme Blend	Not available.
	20 mM dNTP Mix	Not available.
	10X Core PCR Buffer	Not available.
	50 mM Magnesium Chloride	Not available.

**SECTION 9: Physical and chemical properties**

<b>Viscosity</b>	:	E.coli Poly A Polymerase	Not available.	
		5X E.coli Poly A Polymerase Buffer	Not available.	
		25 mM Manganese Chloride	Not available.	
		10 mM rATP (pH 7.5) in Sterile Water	Not available.	
		Glycogen	Not available.	
		10X AffinityScript RT buffer	Not available.	
		RT Adaptor Primer	Not available.	
		100 mM dNTPs	Not available.	
		AffinityScript RT/RNase Block Enzyme Mixture	Not available.	
		Universal Reverse Primer	Not available.	
		Reference Dye	Not available.	
		20X EvaGreen	Not available.	
		PCR Enzyme Blend	Not available.	
		20 mM dNTP Mix	Not available.	
		10X Core PCR Buffer	Not available.	
		50 mM Magnesium Chloride	Not available.	
	<b>Explosive properties</b>	:	E.coli Poly A Polymerase	Not available.
			5X E.coli Poly A Polymerase Buffer	Not available.
			25 mM Manganese Chloride	Not available.
			10 mM rATP (pH 7.5) in Sterile Water	Not available.
		Glycogen	Not available.	
		10X AffinityScript RT buffer	Not available.	
		RT Adaptor Primer	Not available.	
		100 mM dNTPs	Not available.	
		AffinityScript RT/RNase Block Enzyme Mixture	Not available.	
		Universal Reverse Primer	Not available.	
		Reference Dye	Not available.	
		20X EvaGreen	Not available.	
		PCR Enzyme Blend	Not available.	
		20 mM dNTP Mix	Not available.	
		10X Core PCR Buffer	Not available.	
		50 mM Magnesium Chloride	Not available.	
<b>Oxidising properties</b>		:	E.coli Poly A Polymerase	Not available.
			5X E.coli Poly A Polymerase Buffer	Not available.
			25 mM Manganese Chloride	Not available.
			10 mM rATP (pH 7.5) in Sterile Water	Not available.
		Glycogen	Not available.	
		10X AffinityScript RT buffer	Not available.	
		RT Adaptor Primer	Not available.	
		100 mM dNTPs	Not available.	
		AffinityScript RT/RNase Block Enzyme Mixture	Not available.	
		Universal Reverse	Not available.	



## SECTION 9: Physical and chemical properties

Primer	
Reference Dye	Not available.
20X EvaGreen	Not available.
PCR Enzyme Blend	Not available.
20 mM dNTP Mix	Not available.
10X Core PCR Buffer	Not available.
50 mM Magnesium Chloride	Not available.

### 9.2 Other information

No additional information.

## SECTION 10: Stability and reactivity

<b>10.1 Reactivity</b>	:	E.coli Poly A Polymerase	No specific test data related to reactivity available for this product or its ingredients.
		5X E.coli Poly A Polymerase Buffer	No specific test data related to reactivity available for this product or its ingredients.
		25 mM Manganese Chloride	No specific test data related to reactivity available for this product or its ingredients.
		10 mM rATP (pH 7.5) in Sterile Water	No specific test data related to reactivity available for this product or its ingredients.
		Glycogen	No specific test data related to reactivity available for this product or its ingredients.
		10X AffinityScript RT buffer	No specific test data related to reactivity available for this product or its ingredients.
		RT Adaptor Primer	No specific test data related to reactivity available for this product or its ingredients.
		100 mM dNTPs	No specific test data related to reactivity available for this product or its ingredients.
		AffinityScript RT/RNase Block Enzyme Mixture	No specific test data related to reactivity available for this product or its ingredients.
		Universal Reverse Primer	No specific test data related to reactivity available for this product or its ingredients.
		Reference Dye	No specific test data related to reactivity available for this product or its ingredients.
		20X EvaGreen	No specific test data related to reactivity available for this product or its ingredients.
		PCR Enzyme Blend	No specific test data related to reactivity available for this product or its ingredients.
		20 mM dNTP Mix	No specific test data related to reactivity available for this product or its ingredients.
		10X Core PCR Buffer	No specific test data related to reactivity available for this product or its ingredients.
		50 mM Magnesium Chloride	No specific test data related to reactivity available for this product or its ingredients.
<b>10.2 Chemical stability</b>	:	E.coli Poly A Polymerase	The product is stable.
		5X E.coli Poly A Polymerase Buffer	The product is stable.
		25 mM Manganese Chloride	The product is stable.
		10 mM rATP (pH 7.5) in Sterile Water	The product is stable.
		Glycogen	The product is stable.
		10X AffinityScript RT buffer	The product is stable.
		RT Adaptor Primer	The product is stable.
		100 mM dNTPs	The product is stable.
		AffinityScript RT/RNase Block Enzyme Mixture	The product is stable.
		Universal Reverse Primer	The product is stable.

**SECTION 10: Stability and reactivity**

Reference Dye	The product is stable.
20X EvaGreen	The product is stable.
PCR Enzyme Blend	The product is stable.
20 mM dNTP Mix	The product is stable.
10X Core PCR Buffer	The product is stable.
50 mM Magnesium Chloride	The product is stable.

**10.3 Possibility of hazardous reactions**

<b>:</b> E.coli Poly A Polymerase	Under normal conditions of storage and use, hazardous reactions will not occur.
5X E.coli Poly A Polymerase Buffer	Under normal conditions of storage and use, hazardous reactions will not occur.
25 mM Manganese Chloride	Under normal conditions of storage and use, hazardous reactions will not occur.
10 mM rATP (pH 7.5) in Sterile Water	Under normal conditions of storage and use, hazardous reactions will not occur.
Glycogen	Under normal conditions of storage and use, hazardous reactions will not occur.
10X AffinityScript RT buffer	Under normal conditions of storage and use, hazardous reactions will not occur.
RT Adaptor Primer	Under normal conditions of storage and use, hazardous reactions will not occur.
100 mM dNTPs	Under normal conditions of storage and use, hazardous reactions will not occur.
AffinityScript RT/RNase Block Enzyme Mixture	Under normal conditions of storage and use, hazardous reactions will not occur.
Universal Reverse Primer	Under normal conditions of storage and use, hazardous reactions will not occur.
Reference Dye	Under normal conditions of storage and use, hazardous reactions will not occur.
20X EvaGreen	Under normal conditions of storage and use, hazardous reactions will not occur.
PCR Enzyme Blend	Under normal conditions of storage and use, hazardous reactions will not occur.
20 mM dNTP Mix	Under normal conditions of storage and use, hazardous reactions will not occur.
10X Core PCR Buffer	Under normal conditions of storage and use, hazardous reactions will not occur.
50 mM Magnesium Chloride	Under normal conditions of storage and use, hazardous reactions will not occur.

**10.4 Conditions to avoid**

<b>:</b> E.coli Poly A Polymerase	No specific data.
5X E.coli Poly A Polymerase Buffer	No specific data.
25 mM Manganese Chloride	No specific data.
10 mM rATP (pH 7.5) in Sterile Water	No specific data.
Glycogen	No specific data.
10X AffinityScript RT buffer	No specific data.
RT Adaptor Primer	No specific data.
100 mM dNTPs	No specific data.
AffinityScript RT/RNase Block Enzyme Mixture	No specific data.
Universal Reverse Primer	No specific data.
Reference Dye	No specific data.
20X EvaGreen	No specific data.
PCR Enzyme Blend	No specific data.
20 mM dNTP Mix	No specific data.
10X Core PCR Buffer	No specific data.
50 mM Magnesium Chloride	No specific data.

**SECTION 10: Stability and reactivity**

Chloride

**10.5 Incompatible materials**

E.coli Poly A Polymerase	May react or be incompatible with oxidising materials.
5X E.coli Poly A Polymerase Buffer	May react or be incompatible with oxidising materials.
25 mM Manganese Chloride	May react or be incompatible with oxidising materials.
10 mM rATP (pH 7.5) in Sterile Water	May react or be incompatible with oxidising materials.
Glycogen	May react or be incompatible with oxidising materials.
10X AffinityScript RT buffer	May react or be incompatible with oxidising materials.
RT Adaptor Primer	May react or be incompatible with oxidising materials.
100 mM dNTPs	May react or be incompatible with oxidising materials.
AffinityScript RT/RNase Block Enzyme Mixture	May react or be incompatible with oxidising materials.
Universal Reverse Primer	May react or be incompatible with oxidising materials.
Reference Dye	May react or be incompatible with oxidising materials.
20X EvaGreen	May react or be incompatible with oxidising materials.
PCR Enzyme Blend	May react or be incompatible with oxidising materials.
20 mM dNTP Mix	May react or be incompatible with oxidising materials.
10X Core PCR Buffer	May react or be incompatible with oxidising materials.
50 mM Magnesium Chloride	May react or be incompatible with oxidising materials.

**10.6 Hazardous decomposition products**

E.coli Poly A Polymerase	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
5X E.coli Poly A Polymerase Buffer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
25 mM Manganese Chloride	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
10 mM rATP (pH 7.5) in Sterile Water	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Glycogen	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
10X AffinityScript RT buffer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
RT Adaptor Primer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
100 mM dNTPs	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
AffinityScript RT/RNase Block Enzyme Mixture	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Universal Reverse Primer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Reference Dye	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
20X EvaGreen	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
PCR Enzyme Blend	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
20 mM dNTP Mix	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
10X Core PCR Buffer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
50 mM Magnesium Chloride	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
<b>E.coli Poly A Polymerase</b> Sodium chloride	LD50 Oral	Rat	3000 mg/kg	-
<b>5X E.coli Poly A Polymerase Buffer</b> Sodium chloride	LD50 Oral	Rat	3000 mg/kg	-

#### Acute toxicity estimates

Not available.

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
<b>E.coli Poly A Polymerase</b> Sodium chloride	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	10 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
<b>5X E.coli Poly A Polymerase Buffer</b> Sodium chloride	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	10 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-

#### Sensitiser

**Conclusion/Summary** : Not available.

#### Chronic toxicity / Carcinogenicity / Mutagenicity / Teratogenicity / Reproductive toxicity

Not available.

#### Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
<b>5X E.coli Poly A Polymerase Buffer</b> 2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	Category 3	Not applicable.	Respiratory tract irritation
<b>10X AffinityScript RT buffer</b> 2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	Category 3	Not applicable.	Respiratory tract irritation
<b>Reference Dye</b> 2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	Category 3	Not applicable.	Respiratory tract irritation
<b>10X Core PCR Buffer</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.

**SECTION 11: Toxicological information**

<b>Information on likely routes of exposure</b>	: E.coli Poly A Polymerase	Routes of entry anticipated: Oral, Dermal, Inhalation.
	5X E.coli Poly A Polymerase Buffer	Routes of entry anticipated: Oral, Dermal, Inhalation.
	25 mM Manganese Chloride	Not available.
	10 mM rATP (pH 7.5) in Sterile Water	Not available.
	Glycogen	Not available.
	10X AffinityScript RT buffer	Routes of entry anticipated: Oral, Dermal, Inhalation.
	RT Adaptor Primer	Not available.
	100 mM dNTP Mix (25 mM each dNTP)	Routes of entry anticipated: Oral, Dermal, Inhalation.
	AffinityScript RT/RNase Block Enzyme Mixture	Routes of entry anticipated: Oral, Dermal, Inhalation.
	Universal Reverse Primer	Not available.
	Reference Dye	Routes of entry anticipated: Oral, Dermal, Inhalation.
	20X EvaGreen	Not available.
	PCR Enzyme Blend	Routes of entry anticipated: Oral, Dermal, Inhalation.
	20 mM dNTP Mix (5 mM each dNTP)	Not available.
	10X Core PCR Buffer	Routes of entry anticipated: Oral, Dermal, Inhalation.
	50 mM Magnesium Chloride	Not available.

**Potential acute health effects**

<b>Inhalation</b>	: E.coli Poly A Polymerase	No known significant effects or critical hazards.
	5X E.coli Poly A Polymerase Buffer	No known significant effects or critical hazards.
	25 mM Manganese Chloride	No known significant effects or critical hazards.
	10 mM rATP (pH 7.5) in Sterile Water	No known significant effects or critical hazards.
	Glycogen	No known significant effects or critical hazards.
	10X AffinityScript RT buffer	No known significant effects or critical hazards.
	RT Adaptor Primer	No known significant effects or critical hazards.
	100 mM dNTPs	No known significant effects or critical hazards.
	AffinityScript RT/RNase Block Enzyme Mixture	No known significant effects or critical hazards.
	Universal Reverse Primer	No known significant effects or critical hazards.
	Reference Dye	No known significant effects or critical hazards.
	20X EvaGreen	No known significant effects or critical hazards.
	PCR Enzyme Blend	No known significant effects or critical hazards.
	20 mM dNTP Mix	No known significant effects or critical hazards.
	10X Core PCR Buffer	No known significant effects or critical hazards.
	50 mM Magnesium Chloride	No known significant effects or critical hazards.
<b>Ingestion</b>	: E.coli Poly A Polymerase	No known significant effects or critical hazards.
	5X E.coli Poly A Polymerase Buffer	No known significant effects or critical hazards.
	25 mM Manganese Chloride	No known significant effects or critical hazards.
	10 mM rATP (pH 7.5) in Sterile Water	No known significant effects or critical hazards.
	Glycogen	No known significant effects or critical hazards.
	10X AffinityScript RT buffer	No known significant effects or critical hazards.
	RT Adaptor Primer	No known significant effects or critical hazards.
	100 mM dNTPs	No known significant effects or critical hazards.
	AffinityScript RT/RNase	No known significant effects or critical hazards.

**SECTION 11: Toxicological information**

	Block Enzyme Mixture	
	Universal Reverse Primer	No known significant effects or critical hazards.
	Reference Dye	No known significant effects or critical hazards.
	20X EvaGreen	No known significant effects or critical hazards.
	PCR Enzyme Blend	No known significant effects or critical hazards.
	20 mM dNTP Mix	No known significant effects or critical hazards.
	10X Core PCR Buffer	No known significant effects or critical hazards.
	50 mM Magnesium Chloride	No known significant effects or critical hazards.
<b>Skin contact</b>	: E.coli Poly A Polymerase	No known significant effects or critical hazards.
	5X E.coli Poly A Polymerase Buffer	No known significant effects or critical hazards.
	25 mM Manganese Chloride	No known significant effects or critical hazards.
	10 mM rATP (pH 7.5) in Sterile Water	No known significant effects or critical hazards.
	Glycogen	No known significant effects or critical hazards.
	10X AffinityScript RT buffer	No known significant effects or critical hazards.
	RT Adaptor Primer	No known significant effects or critical hazards.
	100 mM dNTPs	No known significant effects or critical hazards.
	AffinityScript RT/RNase	No known significant effects or critical hazards.
	Block Enzyme Mixture	
	Universal Reverse Primer	No known significant effects or critical hazards.
	Reference Dye	No known significant effects or critical hazards.
	20X EvaGreen	No known significant effects or critical hazards.
	PCR Enzyme Blend	No known significant effects or critical hazards.
	20 mM dNTP Mix	No known significant effects or critical hazards.
	10X Core PCR Buffer	No known significant effects or critical hazards.
	50 mM Magnesium Chloride	No known significant effects or critical hazards.
<b>Eye contact</b>	: E.coli Poly A Polymerase	No known significant effects or critical hazards.
	5X E.coli Poly A Polymerase Buffer	Causes serious eye irritation.
	25 mM Manganese Chloride	No known significant effects or critical hazards.
	10 mM rATP (pH 7.5) in Sterile Water	No known significant effects or critical hazards.
	Glycogen	No known significant effects or critical hazards.
	10X AffinityScript RT buffer	No known significant effects or critical hazards.
	RT Adaptor Primer	No known significant effects or critical hazards.
	100 mM dNTPs	No known significant effects or critical hazards.
	AffinityScript RT/RNase	No known significant effects or critical hazards.
	Block Enzyme Mixture	
	Universal Reverse Primer	No known significant effects or critical hazards.
	Reference Dye	No known significant effects or critical hazards.
	20X EvaGreen	No known significant effects or critical hazards.
	PCR Enzyme Blend	No known significant effects or critical hazards.
	20 mM dNTP Mix	No known significant effects or critical hazards.
	10X Core PCR Buffer	No known significant effects or critical hazards.
	50 mM Magnesium Chloride	No known significant effects or critical hazards.

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



**SECTION 11: Toxicological information**

<b>Inhalation</b>	:	E.coli Poly A Polymerase	No specific data.	
		5X E.coli Poly A Polymerase Buffer	No specific data.	
		25 mM Manganese Chloride	No specific data.	
		10 mM rATP (pH 7.5) in Sterile Water	No specific data.	
		Glycogen	No specific data.	
		10X AffinityScript RT buffer	No specific data.	
		RT Adaptor Primer	No specific data.	
		100 mM dNTPs	No specific data.	
		AffinityScript RT/RNase Block Enzyme Mixture	No specific data.	
		Universal Reverse Primer	No specific data.	
		Reference Dye	No specific data.	
		20X EvaGreen	No specific data.	
		PCR Enzyme Blend	No specific data.	
		20 mM dNTP Mix	No specific data.	
		10X Core PCR Buffer	No specific data.	
		50 mM Magnesium Chloride	No specific data.	
	<b>Ingestion</b>	:	E.coli Poly A Polymerase	No specific data.
			5X E.coli Poly A Polymerase Buffer	No specific data.
			25 mM Manganese Chloride	No specific data.
			10 mM rATP (pH 7.5) in Sterile Water	No specific data.
		Glycogen	No specific data.	
		10X AffinityScript RT buffer	No specific data.	
		RT Adaptor Primer	No specific data.	
		100 mM dNTPs	No specific data.	
		AffinityScript RT/RNase Block Enzyme Mixture	No specific data.	
		Universal Reverse Primer	No specific data.	
		Reference Dye	No specific data.	
		20X EvaGreen	No specific data.	
		PCR Enzyme Blend	No specific data.	
		20 mM dNTP Mix	No specific data.	
		10X Core PCR Buffer	No specific data.	
		50 mM Magnesium Chloride	No specific data.	
<b>Skin contact</b>		:	E.coli Poly A Polymerase	No specific data.
			5X E.coli Poly A Polymerase Buffer	No specific data.
			25 mM Manganese Chloride	No specific data.
			10 mM rATP (pH 7.5) in Sterile Water	No specific data.
		Glycogen	No specific data.	
		10X AffinityScript RT buffer	No specific data.	
		RT Adaptor Primer	No specific data.	
		100 mM dNTPs	No specific data.	
		AffinityScript RT/RNase Block Enzyme Mixture	No specific data.	
		Universal Reverse Primer	No specific data.	
		Reference Dye	No specific data.	

**SECTION 11: Toxicological information**

	20X EvaGreen	No specific data.
	PCR Enzyme Blend	No specific data.
	20 mM dNTP Mix	No specific data.
	10X Core PCR Buffer	No specific data.
	50 mM Magnesium Chloride	No specific data.
<b>Eye contact</b>	: E.coli Poly A Polymerase	No specific data.
	5X E.coli Poly A Polymerase Buffer	Adverse symptoms may include the following:
		pain or irritation
		watering
		redness
	25 mM Manganese Chloride	No specific data.
	10 mM rATP (pH 7.5) in Sterile Water	No specific data.
	Glycogen	No specific data.
	10X AffinityScript RT buffer	No specific data.
	RT Adaptor Primer	No specific data.
	100 mM dNTPs	No specific data.
	AffinityScript RT/RNase Block Enzyme Mixture	No specific data.
	Universal Reverse Primer	No specific data.
	Reference Dye	No specific data.
	20X EvaGreen	No specific data.
	PCR Enzyme Blend	No specific data.
	20 mM dNTP Mix	No specific data.
	10X Core PCR Buffer	No specific data.
	50 mM Magnesium Chloride	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**

<b>General</b>	: E.coli Poly A Polymerase	No known significant effects or critical hazards.
	5X E.coli Poly A Polymerase Buffer	No known significant effects or critical hazards.
	25 mM Manganese Chloride	No known significant effects or critical hazards.
	10 mM rATP (pH 7.5) in Sterile Water	No known significant effects or critical hazards.
	Glycogen	No known significant effects or critical hazards.
	10X AffinityScript RT buffer	No known significant effects or critical hazards.
	RT Adaptor Primer	No known significant effects or critical hazards.
	100 mM dNTPs	No known significant effects or critical hazards.
	AffinityScript RT/RNase Block Enzyme Mixture	No known significant effects or critical hazards.
	Universal Reverse Primer	No known significant effects or critical hazards.
	Reference Dye	No known significant effects or critical hazards.

**SECTION 11: Toxicological information**

	20X EvaGreen	No known significant effects or critical hazards.
	PCR Enzyme Blend	No known significant effects or critical hazards.
	20 mM dNTP Mix	No known significant effects or critical hazards.
	10X Core PCR Buffer	No known significant effects or critical hazards.
	50 mM Magnesium Chloride	No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: E.coli Poly A Polymerase	No known significant effects or critical hazards.
	5X E.coli Poly A Polymerase Buffer	No known significant effects or critical hazards.
	25 mM Manganese Chloride	No known significant effects or critical hazards.
	10 mM rATP (pH 7.5) in Sterile Water	No known significant effects or critical hazards.
	Glycogen	No known significant effects or critical hazards.
	10X AffinityScript RT buffer	No known significant effects or critical hazards.
	RT Adaptor Primer	No known significant effects or critical hazards.
	100 mM dNTPs	No known significant effects or critical hazards.
	AffinityScript RT/RNase Block Enzyme Mixture	No known significant effects or critical hazards.
	Universal Reverse Primer	No known significant effects or critical hazards.
	Reference Dye	No known significant effects or critical hazards.
	20X EvaGreen	No known significant effects or critical hazards.
	PCR Enzyme Blend	No known significant effects or critical hazards.
	20 mM dNTP Mix	No known significant effects or critical hazards.
	10X Core PCR Buffer	No known significant effects or critical hazards.
	50 mM Magnesium Chloride	No known significant effects or critical hazards.
<b>Mutagenicity</b>	: E.coli Poly A Polymerase	No known significant effects or critical hazards.
	5X E.coli Poly A Polymerase Buffer	No known significant effects or critical hazards.
	25 mM Manganese Chloride	No known significant effects or critical hazards.
	10 mM rATP (pH 7.5) in Sterile Water	No known significant effects or critical hazards.
	Glycogen	No known significant effects or critical hazards.
	10X AffinityScript RT buffer	No known significant effects or critical hazards.
	RT Adaptor Primer	No known significant effects or critical hazards.
	100 mM dNTPs	No known significant effects or critical hazards.
	AffinityScript RT/RNase Block Enzyme Mixture	No known significant effects or critical hazards.
	Universal Reverse Primer	No known significant effects or critical hazards.
	Reference Dye	No known significant effects or critical hazards.
	20X EvaGreen	No known significant effects or critical hazards.
	PCR Enzyme Blend	No known significant effects or critical hazards.
	20 mM dNTP Mix	No known significant effects or critical hazards.
	10X Core PCR Buffer	No known significant effects or critical hazards.
	50 mM Magnesium Chloride	No known significant effects or critical hazards.
<b>Teratogenicity</b>	: E.coli Poly A Polymerase	No known significant effects or critical hazards.
	5X E.coli Poly A Polymerase Buffer	No known significant effects or critical hazards.
	25 mM Manganese Chloride	No known significant effects or critical hazards.
	10 mM rATP (pH 7.5) in Sterile Water	No known significant effects or critical hazards.
	Glycogen	No known significant effects or critical hazards.
	10X AffinityScript RT buffer	No known significant effects or critical hazards.
	RT Adaptor Primer	No known significant effects or critical hazards.

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	100 mM dNTPs	No known significant effects or critical hazards.
	AffinityScript RT/RNase	No known significant effects or critical hazards.
	Block Enzyme Mixture	
	Universal Reverse	No known significant effects or critical hazards.
	Primer	
	Reference Dye	No known significant effects or critical hazards.
	20X EvaGreen	No known significant effects or critical hazards.
	PCR Enzyme Blend	No known significant effects or critical hazards.
	20 mM dNTP Mix	No known significant effects or critical hazards.
	10X Core PCR Buffer	No known significant effects or critical hazards.
	50 mM Magnesium	No known significant effects or critical hazards.
	Chloride	
<b>Developmental effects</b>	: E.coli Poly A Polymerase	No known significant effects or critical hazards.
	5X E.coli Poly A	No known significant effects or critical hazards.
	Polymerase Buffer	
	25 mM Manganese	No known significant effects or critical hazards.
	Chloride	
	10 mM rATP (pH 7.5) in	No known significant effects or critical hazards.
	Sterile Water	
	Glycogen	No known significant effects or critical hazards.
	10X AffinityScript RT	No known significant effects or critical hazards.
	buffer	
	RT Adaptor Primer	No known significant effects or critical hazards.
	100 mM dNTPs	No known significant effects or critical hazards.
	AffinityScript RT/RNase	No known significant effects or critical hazards.
	Block Enzyme Mixture	
	Universal Reverse	No known significant effects or critical hazards.
	Primer	
	Reference Dye	No known significant effects or critical hazards.
	20X EvaGreen	No known significant effects or critical hazards.
	PCR Enzyme Blend	No known significant effects or critical hazards.
	20 mM dNTP Mix	No known significant effects or critical hazards.
	10X Core PCR Buffer	No known significant effects or critical hazards.
	50 mM Magnesium	No known significant effects or critical hazards.
	Chloride	
<b>Fertility effects</b>	: E.coli Poly A Polymerase	No known significant effects or critical hazards.
	5X E.coli Poly A	No known significant effects or critical hazards.
	Polymerase Buffer	
	25 mM Manganese	No known significant effects or critical hazards.
	Chloride	
	10 mM rATP (pH 7.5) in	No known significant effects or critical hazards.
	Sterile Water	
	Glycogen	No known significant effects or critical hazards.
	10X AffinityScript RT	No known significant effects or critical hazards.
	buffer	
	RT Adaptor Primer	No known significant effects or critical hazards.
	100 mM dNTPs	No known significant effects or critical hazards.
	AffinityScript RT/RNase	No known significant effects or critical hazards.
	Block Enzyme Mixture	
	Universal Reverse	No known significant effects or critical hazards.
	Primer	
	Reference Dye	No known significant effects or critical hazards.
	20X EvaGreen	No known significant effects or critical hazards.
	PCR Enzyme Blend	No known significant effects or critical hazards.
	20 mM dNTP Mix	No known significant effects or critical hazards.
	10X Core PCR Buffer	No known significant effects or critical hazards.
	50 mM Magnesium	No known significant effects or critical hazards.
	Chloride	

## SECTION 12: Ecological information

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
<b>E.coli Poly A Polymerase</b> Sodium chloride	Acute EC50 2430000 µg/l Fresh water	Algae - Navicula seminulum	96 hours
	Acute EC50 28.85 mg/dm3 Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 519.6 mg/l Fresh water	Crustaceans - Cypris subglobosa	48 hours
	Acute IC50 6.87 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
	Acute LC50 1661 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 1000000 µg/l Fresh water	Fish - Morone saxatilis - Larvae	96 hours
	Chronic LC10 781 mg/l Fresh water	Crustaceans - Hyalella azteca - Juvenile (Fledgling, Hatchling, Weanling)	3 weeks
	Chronic NOEC 6 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
	Chronic NOEC 0.314 g/L Fresh water	Daphnia - Daphnia pulex	21 days
	Chronic NOEC 100 mg/l Fresh water	Fish - Gambusia holbrooki - Adult	8 weeks
<b>5X E.coli Poly A Polymerase Buffer</b> Sodium chloride	Acute EC50 2430000 µg/l Fresh water	Algae - Navicula seminulum	96 hours
	Acute EC50 28.85 mg/dm3 Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 519.6 mg/l Fresh water	Crustaceans - Cypris subglobosa	48 hours
	Acute IC50 6.87 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
	Acute LC50 1661 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 1000000 µg/l Fresh water	Fish - Morone saxatilis - Larvae	96 hours
	Chronic LC10 781 mg/l Fresh water	Crustaceans - Hyalella azteca - Juvenile (Fledgling, Hatchling, Weanling)	3 weeks
	Chronic NOEC 6 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
	Chronic NOEC 0.314 g/L Fresh water	Daphnia - Daphnia pulex	21 days
	Chronic NOEC 100 mg/l Fresh water	Fish - Gambusia holbrooki - Adult	8 weeks

### 12.2 Persistence and degradability

Not available.

### 12.3 Bioaccumulative potential

Not available.

### 12.4 Mobility in soil

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

**Mobility** : Not available.

### 12.5 Results of PBT and vPvB assessment

**PBT** : Not applicable.

**vPvB** : Not applicable.

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

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

**Methods of disposal** : 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.

**Hazardous waste** : The classification of the product may meet the criteria for a hazardous waste.

#### Packaging

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**Special precautions** : 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 spilled material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: Transport information

### Regulatory information

**ADR/RID / IMDG / IATA** : Not regulated.

**14.6 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.

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

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### EU Regulation (EC) No. 1907/2006 (REACH)

##### Annex XIV - List of substances subject to authorisation

##### Annex XIV

None of the components are listed.

##### Substances of very high concern

None of the components are listed.

<b>Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</b>	<b>E.coli Poly A Polymerase</b>	Not applicable.
	<b>5X E.coli Poly A Polymerase Buffer</b>	Not applicable.
	<b>25 mM Manganese Chloride</b>	Not applicable.
	<b>10 mM rATP (pH 7.5) in Sterile Water</b>	Not applicable.
	<b>Glycogen</b>	Not applicable.
	<b>10X AffinityScript RT buffer</b>	Not applicable.
	<b>RT Adaptor Primer</b>	Not applicable.
	<b>100 mM dNTPs</b>	Not applicable.
	<b>AffinityScript RT/RNase Block Enzyme Mixture</b>	Not applicable.
	<b>Universal Reverse Primer</b>	Not applicable.
	<b>Reference Dye</b>	Not applicable.
	<b>20X EvaGreen</b>	Not applicable.



## SECTION 15: Regulatory information

PCR Enzyme Blend	Not applicable.
20 mM dNTP Mix	Not applicable.
10X Core PCR Buffer	Not applicable.
50 mM Magnesium Chloride	Not applicable.

### Other EU regulations

**Europe inventory** : Not determined.

### Seveso Directive

This product is not controlled under the Seveso Directive.

### National regulations

#### 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 Inform Consent (PIC)

Not listed.

### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### International lists

#### National inventory

<b>Australia</b>	: Not determined.
<b>Canada</b>	: Not determined.
<b>China</b>	: Not determined.
<b>Japan</b>	: <b>Japan inventory (ENCS)</b> : Not determined. <b>Japan inventory (ISHL)</b> : Not determined.
<b>Malaysia</b>	: Not determined.
<b>New Zealand</b>	: Not determined.
<b>Philippines</b>	: Not determined.
<b>Republic of Korea</b>	: Not determined.
<b>Taiwan</b>	: Not determined.
<b>Turkey</b>	: Not determined.
<b>United States</b>	: At least one component is not listed.

**15.2 Chemical safety assessment** : This product contains substances for which Chemical Safety Assessments might still be required.

## SECTION 16: Other information

✔ Indicates information that has changed from previously issued version.

**Abbreviations and acronyms** : ATE = Acute Toxicity Estimate  
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]  
DNEL = Derived No Effect Level  
EUH statement = CLP-specific Hazard statement  
PNEC = Predicted No Effect Concentration  
RRN = REACH Registration Number

**Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]**

**SECTION 16: Other information**

Classification	Justification
<b>5X E.coli Poly A Polymerase Buffer</b> Eye Irrit. 2, H319	Calculation method

<p><b>Full text of abbreviated H statements</b></p>	<p><b>: E.coli Poly A Polymerase</b> H319</p> <p><b>5X E.coli Poly A Polymerase Buffer</b> H315 H319 H335</p> <p><b>10X AffinityScript RT buffer</b> H315 H319 H335</p> <p><b>Reference Dye</b> H315 H319 H335</p> <p><b>10X Core PCR Buffer</b> H315 H319 H335</p>	<p>Causes serious eye irritation.</p> <p>Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.</p> <p>Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.</p> <p>Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.</p> <p>Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.</p>
<p><b>Full text of classifications [CLP/GHS]</b></p>	<p><b>: E.coli Poly A Polymerase</b> Eye Irrit. 2, H319</p> <p><b>5X E.coli Poly A Polymerase Buffer</b> Eye Irrit. 2, H319 Skin Irrit. 2, H315 STOT SE 3, H335</p> <p><b>10X AffinityScript RT buffer</b> Eye Irrit. 2, H319 Skin Irrit. 2, H315 STOT SE 3, H335</p> <p><b>Reference Dye</b> Eye Irrit. 2, H319 Skin Irrit. 2, H315 STOT SE 3, H335</p> <p><b>10X Core PCR Buffer</b> Eye Irrit. 2, H319 Skin Irrit. 2, H315 STOT SE 3, H335</p>	<p>SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2</p> <p>SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 SKIN CORROSION/IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3</p> <p>SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 SKIN CORROSION/IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3</p> <p>SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 SKIN CORROSION/IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3</p> <p>SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 SKIN CORROSION/IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3</p>

**Date of issue/ Date of revision** : 30/03/2016

**Date of previous issue** : No previous validation.

**Version** : 1

## SECTION 16: Other information

### [Notice to reader](#)

Disclaimer: The information contained in this document is based on Agilent's state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.