

# SAFETY DATA SHEET



Brilliant II SYBR Green QRT-PCR - AffinityScript Two-Step Master Mix, Part Number 600834

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

### 1.1 Product identifier

**Product name** : Brilliant II SYBR Green QRT-PCR - AffinityScript Two-Step Master Mix, Part Number 600834

**Part no. (chemical kit)** : 600834

**Part no.** : 600559 AffinityScript QPCR cDNA Synthesis Kit

RNase-Free Water	600164-58
Oligo (dT) Primer	600554-53
2X cDNA Synthesis Master Mix	600559-51
AffinityScript RT/RNase Block Enzyme Mixture	600559-52

600828 Brilliant II SYBR Green QPCR Master Mix

2X Brilliant II SYBR® Green QPCR Master Mix	600828-51
Reference Dye	600530-53

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

**Material uses** : Analytical reagent.

RNase-Free Water	1.2 ml
2X Brilliant II SYBR® Green QPCR Master Mix	2 × 2.5 ml
Reference Dye	0.1 ml (100 µl 1 mM)
AffinityScript RT/RNase Block Enzyme Mixture	0.05 ml
2X cDNA Synthesis Master Mix	0.5 ml
Oligo (dT) Primer	0.2 ml (15 µg 100 ng/µl)

### 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

**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>	: RNase-Free Water	Mono-constituent substance
	2X Brilliant II SYBR®	Mixture
	Green QPCR Master Mix	
	Reference Dye	Mixture
	AffinityScript RT/RNase	Mixture
	Block Enzyme Mixture	
	2X cDNA Synthesis	Mixture
	Master Mix	
	Oligo (dT) Primer	Mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Not classified.

<b>Ingredients of unknown toxicity</b>	: 2X Brilliant II SYBR®	Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 10 - 30%
	Green QPCR Master Mix	Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 1 - 10%
	Reference Dye	Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 1 - 10%
		Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 1 - 10%
	AffinityScript RT/RNase	Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 30 - 60%
	Block Enzyme Mixture	Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 1 - 10%
	2X cDNA Synthesis	Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 1 - 10%
	Master Mix	Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 1 - 10%
<b>Ingredients of unknown ecotoxicity</b>	: Reference Dye	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 2.4%
	2X cDNA Synthesis	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 1.6%
	Master Mix	

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

<b>Signal word</b>	: RNase-Free Water	No signal word.
	2X Brilliant II SYBR®	No signal word.
	Green QPCR Master Mix	
	Reference Dye	No signal word.
	AffinityScript RT/RNase	No signal word.
	Block Enzyme Mixture	
	2X cDNA Synthesis	No signal word.
	Master Mix	
	Oligo (dT) Primer	No signal word.
<b>Hazard statements</b>	: RNase-Free Water	No known significant effects or critical hazards.
	2X Brilliant II SYBR®	No known significant effects or critical hazards.
	Green QPCR Master Mix	
	Reference Dye	No known significant effects or critical hazards.
	AffinityScript RT/RNase	No known significant effects or critical hazards.
	Block Enzyme Mixture	
	2X cDNA Synthesis	No known significant effects or critical hazards.
	Master Mix	
	Oligo (dT) Primer	No known significant effects or critical hazards.

#### Precautionary statements

## SECTION 2: Hazards identification

<b>Prevention</b>	: RNase-Free Water 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye AffinityScript RT/RNase Block Enzyme Mixture 2X cDNA Synthesis Master Mix Oligo (dT) Primer	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.
<b>Response</b>	: RNase-Free Water 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye AffinityScript RT/RNase Block Enzyme Mixture 2X cDNA Synthesis Master Mix Oligo (dT) Primer	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.
<b>Storage</b>	: RNase-Free Water 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye AffinityScript RT/RNase Block Enzyme Mixture 2X cDNA Synthesis Master Mix Oligo (dT) Primer	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.
<b>Disposal</b>	: RNase-Free Water 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye AffinityScript RT/RNase Block Enzyme Mixture 2X cDNA Synthesis Master Mix Oligo (dT) Primer	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.
<b>Hazardous ingredients</b>	: Reference Dye 2X cDNA Synthesis Master Mix	Not applicable. Not applicable.
<b>Supplemental label elements</b>	: RNase-Free Water 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye AffinityScript RT/RNase Block Enzyme Mixture 2X cDNA Synthesis Master Mix Oligo (dT) Primer	Not applicable. Not applicable. Safety data sheet available on request. Not applicable. Safety data sheet available on request. Not applicable.
<b>Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</b>	: RNase-Free Water 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye AffinityScript RT/RNase Block Enzyme Mixture 2X cDNA Synthesis Master Mix Oligo (dT) Primer	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.

### Special packaging requirements

**Brilliant II SYBR Green QRT-PCR - AffinityScript Two-Step Master Mix, Part Number 600834**

## SECTION 2: Hazards identification

<b>Tactile warning of danger</b>	: RNase-Free Water	Not applicable.
	2X Brilliant II SYBR®	Not applicable.
	Green QPCR Master Mix	
	Reference Dye	Not applicable.
	AffinityScript RT/RNase	Not applicable.
	Block Enzyme Mixture	
	2X cDNA Synthesis Master Mix	Not applicable.
	Oligo (dT) Primer	Not applicable.

### 2.3 Other hazards

<b>Other hazards which do not result in classification</b>	: RNase-Free Water	None known.
	2X Brilliant II SYBR®	None known.
	Green QPCR Master Mix	
	Reference Dye	None known.
	AffinityScript RT/RNase	None known.
	Block Enzyme Mixture	
	2X cDNA Synthesis Master Mix	None known.
	Oligo (dT) Primer	None known.

## SECTION 3: Composition/information on ingredients

<b>3.1 Substances</b>	: RNase-Free Water	Mono-constituent substance
	2X Brilliant II SYBR® Green	Mixture
	QPCR Master Mix	
	Reference Dye	Mixture
	AffinityScript RT/RNase Block	Mixture
	Enzyme Mixture	
	2X cDNA Synthesis Master Mix	Mixture
	Oligo (dT) Primer	Mixture

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Type
<b>RNase-Free Water</b> Water	REACH #: Annex IV EC: 231-791-2 CAS: 7732-18-5	100	Not classified.	[A]
<b>2X Brilliant II SYBR® Green QPCR Master Mix</b> Glycerol	REACH #: Annex V EC: 200-289-5 CAS: 56-81-5	≥10 - ≤25	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>AffinityScript RT/RNase Block Enzyme Mixture</b> Glycerol	REACH #: Annex V EC: 200-289-5 CAS: 56-81-5	≥50 - ≤75	Not classified.	[2]
<b>2X cDNA Synthesis Master Mix</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]

**Date of issue/Date of revision** : 12/02/2018

**4/28**

**Brilliant II SYBR Green QRT-PCR - AffinityScript Two-Step Master Mix, Part Number 600834**

### SECTION 3: Composition/information on ingredients

			See Section 16 for the full text of the H statements declared above.	
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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
- [6] Additional disclosure due to company policy
- [A] Constituent
- [B] Impurity
- [C] Stabilising additive

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

##### Eye contact

- : RNase-Free 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.
- 2X Brilliant II SYBR®  
Green QPCR Master 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.
- 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.
- 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.
- 2X cDNA Synthesis  
Master 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.
- Oligo (dT) 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.

##### Inhalation

- : RNase-Free Water  
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- 2X Brilliant II SYBR®  
Green QPCR Master Mix  
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.
- 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.
- 2X cDNA Synthesis  
Master Mix  
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Oligo (dT) Primer  
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if

**SECTION 4: First aid measures**

**Skin contact**

- : RNase-Free Water symptoms occur. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- 2X Brilliant II SYBR® Green QPCR Master Mix 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.
- AffinityScript RT/RNase Block Enzyme Mixture Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- 2X cDNA Synthesis Master Mix Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- Oligo (dT) Primer Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

**Ingestion**

- : RNase-Free Water Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
- 2X Brilliant II SYBR® Green QPCR Master Mix Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
- 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.
- 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.
- 2X cDNA Synthesis Master Mix Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
- Oligo (dT) 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.

## SECTION 4: First aid measures

<b>Protection of first-aiders</b>	: RNase-Free Water 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye AffinityScript RT/RNase Block Enzyme Mixture 2X cDNA Synthesis Master Mix Oligo (dT) Primer	No action shall be taken involving any personal risk or without suitable training. No action shall be taken involving any personal risk or without suitable training. No action shall be taken involving any personal risk or without suitable training. No action shall be taken involving any personal risk or without suitable training. No action shall be taken involving any personal risk or without suitable training. No action shall be taken involving any personal risk or without suitable training.
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### 4.2 Most important symptoms and effects, both acute and delayed

#### Potential acute health effects

<b>Eye contact</b>	: RNase-Free Water 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye AffinityScript RT/RNase Block Enzyme Mixture 2X cDNA Synthesis Master Mix Oligo (dT) Primer	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Inhalation</b>	: RNase-Free Water 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye AffinityScript RT/RNase Block Enzyme Mixture 2X cDNA Synthesis Master Mix Oligo (dT) Primer	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Skin contact</b>	: RNase-Free Water 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye AffinityScript RT/RNase Block Enzyme Mixture 2X cDNA Synthesis Master Mix Oligo (dT) Primer	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Ingestion</b>	: RNase-Free Water 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye AffinityScript RT/RNase Block Enzyme Mixture 2X cDNA Synthesis Master Mix Oligo (dT) Primer	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

<b>Eye contact</b>	: RNase-Free Water 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye AffinityScript RT/RNase Block Enzyme Mixture 2X cDNA Synthesis	No specific data. No specific data. No specific data. No specific data. No specific data.
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**SECTION 4: First aid measures**

	Master Mix	
	Oligo (dT) Primer	No specific data.
<b>Inhalation</b>	: RNase-Free Water	No specific data.
	2X Brilliant II SYBR®	No specific data.
	Green QPCR Master Mix	
	Reference Dye	No specific data.
	AffinityScript RT/RNase	No specific data.
	Block Enzyme Mixture	
	2X cDNA Synthesis	No specific data.
	Master Mix	
	Oligo (dT) Primer	No specific data.
<b>Skin contact</b>	: RNase-Free Water	No specific data.
	2X Brilliant II SYBR®	No specific data.
	Green QPCR Master Mix	
	Reference Dye	No specific data.
	AffinityScript RT/RNase	No specific data.
	Block Enzyme Mixture	
	2X cDNA Synthesis	No specific data.
	Master Mix	
	Oligo (dT) Primer	No specific data.
<b>Ingestion</b>	: RNase-Free Water	No specific data.
	2X Brilliant II SYBR®	No specific data.
	Green QPCR Master Mix	
	Reference Dye	No specific data.
	AffinityScript RT/RNase	No specific data.
	Block Enzyme Mixture	
	2X cDNA Synthesis	No specific data.
	Master Mix	
	Oligo (dT) Primer	No specific data.

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

<b>Notes to physician</b>	: RNase-Free Water	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	2X Brilliant II SYBR®	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	Green QPCR Master Mix	Immediately if large quantities have been ingested or inhaled.
	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.
	AffinityScript RT/RNase	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	Block Enzyme Mixture	Immediately if large quantities have been ingested or inhaled.
	2X cDNA Synthesis	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.
	Master Mix	Immediately if large quantities have been ingested or inhaled.
	Oligo (dT) Primer	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
<b>Specific treatments</b>	: RNase-Free Water	No specific treatment.
	2X Brilliant II SYBR®	No specific treatment.
	Green QPCR Master Mix	
	Reference Dye	No specific treatment.
	AffinityScript RT/RNase	No specific treatment.
	Block Enzyme Mixture	
	2X cDNA Synthesis	No specific treatment.
	Master Mix	
	Oligo (dT) Primer	No specific treatment.



## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

<b>Suitable extinguishing media</b>	: RNase-Free Water	Use an extinguishing agent suitable for the surrounding fire.
	2X Brilliant II SYBR®	Use an extinguishing agent suitable for the surrounding fire.
	Green QPCR Master Mix	
	Reference Dye	Use an extinguishing agent suitable for the surrounding fire.
	AffinityScript RT/RNase	Use an extinguishing agent suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	Block Enzyme Mixture	
	2X cDNA Synthesis	Use an extinguishing agent suitable for the surrounding fire.
	Master Mix	
	Oligo (dT) Primer	Use an extinguishing agent suitable for the surrounding fire.
	: RNase-Free Water	None known.
2X Brilliant II SYBR®	None known.	
Green QPCR Master Mix		
Reference Dye	None known.	
AffinityScript RT/RNase	None known.	
Block Enzyme Mixture		
2X cDNA Synthesis	None known.	
Master Mix		
Oligo (dT) Primer	None known.	

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

<b>Hazards from the substance or mixture</b>	: RNase-Free Water	In a fire or if heated, a pressure increase will occur and the container may burst.
	2X Brilliant II SYBR®	In a fire or if heated, a pressure increase will occur and the container may burst.
	Green QPCR Master Mix	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.
	AffinityScript RT/RNase	In a fire or if heated, a pressure increase will occur and the container may burst.
	Block Enzyme Mixture	In a fire or if heated, a pressure increase will occur and the container may burst.
	2X cDNA Synthesis	In a fire or if heated, a pressure increase will occur and the container may burst.
<b>Hazardous combustion products</b>	Master Mix	In a fire or if heated, a pressure increase will occur and the container may burst.
	Oligo (dT) Primer	In a fire or if heated, a pressure increase will occur and the container may burst.
	: RNase-Free Water	No specific data.
	2X Brilliant II SYBR®	Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides
	Green QPCR Master Mix	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides
	Reference Dye	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides
	AffinityScript RT/RNase	Decomposition products may include the following materials: carbon dioxide carbon monoxide
Block Enzyme Mixture	Decomposition products may include the following materials: carbon dioxide carbon monoxide	
<b>2X cDNA Synthesis</b>	Master Mix	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds
	Oligo (dT) Primer	No specific data.

### 5.3 Advice for firefighters

## SECTION 5: Firefighting measures

<b>Special precautions for fire-fighters</b>	: RNase-Free Water	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
	2X Brilliant II SYBR® Green QPCR Master 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.
	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.
	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.
	2X cDNA Synthesis Master 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.
	Oligo (dT) 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.
<b>Special protective equipment for fire-fighters</b>	: RNase-Free Water	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. 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.
	2X Brilliant II SYBR® Green QPCR Master 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.
	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 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.
	2X cDNA Synthesis Master 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.
	Oligo (dT) 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.

## SECTION 6: Accidental release measures

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

<b>For non-emergency personnel</b>	: RNase-Free Water	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
	2X Brilliant II SYBR® Green QPCR Master 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.
	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.
	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.
	2X cDNA Synthesis Master 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.
	Oligo (dT) 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.
<b>For emergency responders</b>	: RNase-Free 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".
	2X Brilliant II SYBR® Green QPCR Master 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".
	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".
	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".
	2X cDNA Synthesis Master 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".
	Oligo (dT) 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".

## SECTION 6: Accidental release measures

<b>6.2 Environmental precautions</b>	: RNase-Free Water	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	2X Brilliant II SYBR® Green QPCR Master 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).
	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).
	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).
	2X cDNA Synthesis Master 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).
	Oligo (dT) 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).

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

<b>Methods for cleaning up</b>	: RNase-Free Water	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
	2X Brilliant II SYBR® Green QPCR Master Mix	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
	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.
	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.
	2X cDNA Synthesis Master Mix	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
	Oligo (dT) 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.

<b>6.4 Reference to other sections</b>	: 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.
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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

<b>Protective measures</b>	: RNase-Free Water	Put on appropriate personal protective equipment (see Section 8).
	2X Brilliant II SYBR® Green QPCR Master Mix	Put on appropriate personal protective equipment (see Section 8).
	Reference Dye	Put on appropriate personal protective equipment (see Section 8).
	AffinityScript RT/RNase Block Enzyme Mixture	Put on appropriate personal protective equipment (see Section 8).
	2X cDNA Synthesis Master Mix	Put on appropriate personal protective equipment (see Section 8).
	Oligo (dT) Primer	Put on appropriate personal protective equipment (see Section 8).
<b>Advice on general occupational hygiene</b>	: RNase-Free Water	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	2X Brilliant II SYBR® Green QPCR Master Mix	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	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 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.
	2X cDNA Synthesis Master Mix	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	Oligo (dT) 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.

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

<b>Storage</b>	: RNase-Free Water	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials
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## SECTION 7: Handling and storage

2X Brilliant II SYBR® Green QPCR Master Mix	before handling or use. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
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 prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
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. See Section 10 for incompatible materials before handling or use.
2X cDNA Synthesis Master 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. See Section 10 for incompatible materials before handling or use.
Oligo (dT) 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. See Section 10 for incompatible materials before handling or use.

### 7.3 Specific end use(s)

#### Recommendations

: RNase-Free Water	Industrial applications, Professional applications.
2X Brilliant II SYBR® Green QPCR Master Mix	Industrial applications, Professional applications.
Reference Dye	Industrial applications, Professional applications.
AffinityScript RT/RNase Block Enzyme Mixture	Industrial applications, Professional applications.
2X cDNA Synthesis Master Mix	Industrial applications, Professional applications.

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## SECTION 7: Handling and storage

	Oligo (dT) Primer	Industrial applications, Professional applications.
<b>Industrial sector specific solutions</b>	: RNase-Free Water	Not applicable.
	2X Brilliant II SYBR®	Not applicable.
	Green QPCR Master Mix	
	Reference Dye	Not applicable.
	AffinityScript RT/RNase	Not applicable.
	Block Enzyme Mixture	
	2X cDNA Synthesis Master Mix	Not applicable.
	Oligo (dT) Primer	Not applicable.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

Product/ingredient name	Exposure limit values
<b>2X Brilliant II SYBR® Green QPCR Master Mix</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

**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 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: safety glasses with side-shields.

## SECTION 8: Exposure controls/personal protection

### Skin protection

- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
- 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>	:	RNase-Free Water	Liquid.	
		2X Brilliant II SYBR® Green QPCR Master Mix	Liquid.	
		Reference Dye	Liquid.	
		AffinityScript RT/RNase Block Enzyme Mixture	Liquid.	
		2X cDNA Synthesis Master Mix	Liquid.	
		Oligo (dT) Primer	Liquid.	
	<b>Colour</b>	:	RNase-Free Water	Colourless.
			2X Brilliant II SYBR® Green QPCR Master Mix	Not available.
			Reference Dye	Not available.
			AffinityScript RT/RNase Block Enzyme Mixture	Not available.
		2X cDNA Synthesis Master Mix	Not available.	
		Oligo (dT) Primer	Not available.	
<b>Odour</b>		:	RNase-Free Water	Odourless.
		2X Brilliant II SYBR® Green QPCR Master Mix	Not available.	
		Reference Dye	Not available.	
		AffinityScript RT/RNase Block Enzyme Mixture	Not available.	
		2X cDNA Synthesis Master Mix	Not available.	
		Oligo (dT) Primer	Not available.	



## SECTION 9: Physical and chemical properties

<b>Odour threshold</b>	:	RNase-Free Water	Not available.
		2X Brilliant II SYBR®	Not available.
		Green QPCR Master Mix	
		Reference Dye	Not available.
		AffinityScript RT/RNase	Not available.
		Block Enzyme Mixture	
		2X cDNA Synthesis Master Mix	Not available.
<b>pH</b>	:	Oligo (dT) Primer	Not available.
		RNase-Free Water	7
		2X Brilliant II SYBR®	Not available.
		Green QPCR Master Mix	
		Reference Dye	8
		AffinityScript RT/RNase	8
		Block Enzyme Mixture	
<b>Melting point/freezing point</b>	:	2X cDNA Synthesis Master Mix	Not available.
		Oligo (dT) Primer	7.5
		RNase-Free Water	0°C
		2X Brilliant II SYBR®	Not available.
		Green QPCR Master Mix	
		Reference Dye	Not available.
		AffinityScript RT/RNase	Not available.
<b>Initial boiling point and boiling range</b>	:	Block Enzyme Mixture	
		2X cDNA Synthesis Master Mix	0°C
		Oligo (dT) Primer	0°C
		RNase-Free Water	100°C
		2X Brilliant II SYBR®	Not available.
		Green QPCR Master Mix	
		Reference Dye	Not available.
<b>Flash point</b>	:	AffinityScript RT/RNase	Not available.
		Block Enzyme Mixture	
		2X cDNA Synthesis Master Mix	100°C
		Oligo (dT) Primer	100°C
		RNase-Free Water	Not applicable.
		2X Brilliant II SYBR®	Not available.
		Green QPCR Master Mix	
<b>Evaporation rate</b>	:	Reference Dye	Not available.
		AffinityScript RT/RNase	Not available.
		Block Enzyme Mixture	
		2X cDNA Synthesis Master Mix	Not available.
		Oligo (dT) Primer	Not available.
		RNase-Free Water	Not available.
		2X Brilliant II SYBR®	Not available.

## SECTION 9: Physical and chemical properties

<b>Flammability (solid, gas)</b>	: RNase-Free Water 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye AffinityScript RT/ RNase Block Enzyme Mixture 2X cDNA Synthesis Master Mix Oligo (dT) Primer	Not applicable. Not applicable.  Not applicable. Not applicable.  Not applicable. Not applicable.
<b>Upper/lower flammability or explosive limits</b>	: RNase-Free Water 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye AffinityScript RT/RNase Block Enzyme Mixture 2X cDNA Synthesis Master Mix Oligo (dT) Primer	Not available. Not available.  Not available. Not available.  Not available. Not available.
<b>Vapour pressure</b>	: RNase-Free Water 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye AffinityScript RT/RNase Block Enzyme Mixture 2X cDNA Synthesis Master Mix Oligo (dT) Primer	3.2 kPa [room temperature] Not available.  Not available. Not available.  Not available. Not available.
<b>Vapour density</b>	: RNase-Free Water 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye AffinityScript RT/RNase Block Enzyme Mixture 2X cDNA Synthesis Master Mix Oligo (dT) Primer	0.62 [Air = 1] Not available.  Not available. Not available.  Not available. Not available.
<b>Relative density</b>	: RNase-Free Water 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye AffinityScript RT/RNase Block Enzyme Mixture 2X cDNA Synthesis Master Mix Oligo (dT) Primer	1 Not available.  Not available. Not available.  Not available. Not available.
<b>Solubility(ies)</b>	: RNase-Free Water  2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye  AffinityScript RT/RNase Block Enzyme Mixture	Easily soluble in the following materials: cold water and hot water.  Soluble in the following materials: cold water and hot water.  Easily soluble in the following materials: cold water and hot water.  Soluble in the following materials: cold water and hot water.

## SECTION 9: Physical and chemical properties

	2X cDNA Synthesis Master Mix	Easily soluble in the following materials: cold water and hot water.
	Oligo (dT) Primer	Easily soluble in the following materials: cold water and hot water.
<b>Partition coefficient: n-octanol/water</b>	: RNase-Free Water	-1.38
	2X Brilliant II SYBR® Green QPCR Master Mix	Not available.
	Reference Dye	Not available.
	AffinityScript RT/RNase Block Enzyme Mixture	Not available.
	2X cDNA Synthesis Master Mix	Not available.
	Oligo (dT) Primer	Not available.
<b>Auto-ignition temperature</b>	: RNase-Free Water	Not applicable.
	2X Brilliant II SYBR® Green QPCR Master Mix	Not available.
	Reference Dye	Not available.
	AffinityScript RT/RNase Block Enzyme Mixture	Not available.
	2X cDNA Synthesis Master Mix	Not available.
	Oligo (dT) Primer	Not available.
<b>Decomposition temperature</b>	: RNase-Free Water	Not available.
	2X Brilliant II SYBR® Green QPCR Master Mix	Not available.
	Reference Dye	Not available.
	AffinityScript RT/RNase Block Enzyme Mixture	Not available.
	2X cDNA Synthesis Master Mix	Not available.
	Oligo (dT) Primer	Not available.
<b>Viscosity</b>	: RNase-Free Water	Not available.
	2X Brilliant II SYBR® Green QPCR Master Mix	Not available.
	Reference Dye	Not available.
	AffinityScript RT/RNase Block Enzyme Mixture	Not available.
	2X cDNA Synthesis Master Mix	Not available.
	Oligo (dT) Primer	Not available.
<b>Explosive properties</b>	: RNase-Free Water	Not available.
	2X Brilliant II SYBR® Green QPCR Master Mix	Not available.
	Reference Dye	Not available.
	AffinityScript RT/RNase Block Enzyme Mixture	Not available.
	2X cDNA Synthesis Master Mix	Not available.
	Oligo (dT) Primer	Not available.

## SECTION 9: Physical and chemical properties

<b>Oxidising properties</b>	: RNase-Free Water	Not applicable.
	2X Brilliant II SYBR®	Not available.
	Green QPCR Master Mix	
	Reference Dye	Not available.
	AffinityScript RT/RNase	Not available.
	Block Enzyme Mixture	
	2X cDNA Synthesis Master Mix	Not available.
	Oligo (dT) Primer	Not available.

### 9.2 Other information

No additional information.

## SECTION 10: Stability and reactivity

<b>10.1 Reactivity</b>	: RNase-Free Water	No specific test data related to reactivity available for this product or its ingredients.
	2X Brilliant II SYBR®	No specific test data related to reactivity available for this product or its ingredients.
	Green QPCR Master Mix	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.
	AffinityScript RT/RNase	No specific test data related to reactivity available for this product or its ingredients.
	Block Enzyme Mixture	No specific test data related to reactivity available for this product or its ingredients.
	2X cDNA Synthesis Master Mix	No specific test data related to reactivity available for this product or its ingredients.
	Oligo (dT) Primer	No specific test data related to reactivity available for this product or its ingredients.

<b>10.2 Chemical stability</b>	: RNase-Free Water	The product is stable.
	2X Brilliant II SYBR®	The product is stable.
	Green QPCR Master Mix	
	Reference Dye	The product is stable.
	AffinityScript RT/RNase	The product is stable.
	Block Enzyme Mixture	
	2X cDNA Synthesis Master Mix	The product is stable.
	Oligo (dT) Primer	The product is stable.

<b>10.3 Possibility of hazardous reactions</b>	: RNase-Free Water	Under normal conditions of storage and use, hazardous reactions will not occur.
	2X Brilliant II SYBR®	Under normal conditions of storage and use, hazardous reactions will not occur.
	Green QPCR Master Mix	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.
	AffinityScript RT/RNase	Under normal conditions of storage and use, hazardous reactions will not occur.
	Block Enzyme Mixture	Under normal conditions of storage and use, hazardous reactions will not occur.
	2X cDNA Synthesis Master Mix	Under normal conditions of storage and use, hazardous reactions will not occur.
	Oligo (dT) Primer	Under normal conditions of storage and use, hazardous reactions will not occur.

<b>10.4 Conditions to avoid</b>	: RNase-Free Water	No specific data.
	2X Brilliant II SYBR®	No specific data.
	Green QPCR Master Mix	
	Reference Dye	No specific data.
	AffinityScript RT/RNase	No specific data.
	Block Enzyme Mixture	
	2X cDNA Synthesis Master Mix	No specific data.

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**SECTION 10: Stability and reactivity**

Oligo (dT) Primer No specific data.

**10.5 Incompatible materials**

: RNase-Free Water May react or be incompatible with oxidising materials.  
2X Brilliant II SYBR® May react or be incompatible with oxidising materials.  
Green QPCR Master Mix  
Reference Dye May react or be incompatible with oxidising materials.  
AffinityScript RT/RNase May react or be incompatible with oxidising materials.  
Block Enzyme Mixture  
2X cDNA Synthesis Master Mix May react or be incompatible with oxidising materials.  
Oligo (dT) Primer May react or be incompatible with oxidising materials.

**10.6 Hazardous decomposition products**

: 2× Brilliant II SYBR® Under normal conditions of storage and use, hazardous decomposition products should not be produced.  
Green QPCR Master Mix Under normal conditions of storage and use, hazardous decomposition products should not be produced.  
Reference dye, 1mM  
AffinityScript RT/RNase Under normal conditions of storage and use, hazardous decomposition products should not be produced.  
Block Enzyme Mixture Under normal conditions of storage and use, hazardous decomposition products should not be produced.  
cDNA Synthesis Master Mix Under normal conditions of storage and use, hazardous decomposition products should not be produced.  
Oligo(dT) Primer Under normal conditions of storage and use, hazardous decomposition products should not be produced.  
Random Primers Under normal conditions of storage and use, hazardous decomposition products should not be produced.  
RNase-free Water 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

Not available.

Acute toxicity estimates

Not available.

Irritation/Corrosion

**Conclusion/Summary** : Not available.

Sensitiser

**Conclusion/Summary** : Not available.

Mutagenicity

**Conclusion/Summary** : Not available.

Carcinogenicity

**Conclusion/Summary** : Not available.

Reproductive toxicity

**Conclusion/Summary** : Not available.

Teratogenicity

**Conclusion/Summary** : Not available.

Specific target organ toxicity (single exposure)

## SECTION 11: Toxicological information

Product/ingredient name	Category	Route of exposure	Target organs
<b>Reference Dye</b> 2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	Category 3	Not applicable.	Respiratory tract irritation
<b>2X cDNA Synthesis Master Mix</b> 2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	Category 3	Not applicable.	Respiratory tract irritation

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

### Information on likely routes of exposure

: RNase-Free Water	Not available.
2X Brilliant II SYBR®	Routes of entry anticipated: Oral, Dermal, Inhalation.
Green QPCR Master Mix	
Reference Dye	Routes of entry anticipated: Oral, Dermal, Inhalation.
AffinityScript RT/RNase	Routes of entry anticipated: Oral, Dermal, Inhalation.
Block Enzyme Mixture	
2X cDNA Synthesis	Routes of entry anticipated: Oral, Dermal, Inhalation.
Master Mix	
Oligo (dT) Primer	Not available.

### Potential acute health effects

#### Inhalation

: RNase-Free Water	No known significant effects or critical hazards.
2X Brilliant II SYBR®	No known significant effects or critical hazards.
Green QPCR Master Mix	
Reference Dye	No known significant effects or critical hazards.
AffinityScript RT/RNase	No known significant effects or critical hazards.
Block Enzyme Mixture	
2X cDNA Synthesis	No known significant effects or critical hazards.
Master Mix	
Oligo (dT) Primer	No known significant effects or critical hazards.

#### Ingestion

: RNase-Free Water	No known significant effects or critical hazards.
2X Brilliant II SYBR®	No known significant effects or critical hazards.
Green QPCR Master Mix	
Reference Dye	No known significant effects or critical hazards.
AffinityScript RT/RNase	No known significant effects or critical hazards.
Block Enzyme Mixture	
2X cDNA Synthesis	No known significant effects or critical hazards.
Master Mix	
Oligo (dT) Primer	No known significant effects or critical hazards.

#### Skin contact

: RNase-Free Water	No known significant effects or critical hazards.
2X Brilliant II SYBR®	No known significant effects or critical hazards.
Green QPCR Master Mix	
Reference Dye	No known significant effects or critical hazards.
AffinityScript RT/RNase	No known significant effects or critical hazards.
Block Enzyme Mixture	
2X cDNA Synthesis	No known significant effects or critical hazards.
Master Mix	
Oligo (dT) Primer	No known significant effects or critical hazards.

## SECTION 11: Toxicological information

<b>Eye contact</b>	: RNase-Free Water	No known significant effects or critical hazards.
	2X Brilliant II SYBR®	No known significant effects or critical hazards.
	Green QPCR Master Mix	
	Reference Dye	No known significant effects or critical hazards.
	AffinityScript RT/RNase	No known significant effects or critical hazards.
	Block Enzyme Mixture	
	2X cDNA Synthesis	No known significant effects or critical hazards.
	Master Mix	
Oligo (dT) Primer	No known significant effects or critical hazards.	

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

<b>Inhalation</b>	: RNase-Free Water	No specific data.
	2X Brilliant II SYBR®	No specific data.
	Green QPCR Master Mix	
	Reference Dye	No specific data.
	AffinityScript RT/RNase	No specific data.
	Block Enzyme Mixture	
	2X cDNA Synthesis	No specific data.
	Master Mix	
Oligo (dT) Primer	No specific data.	

<b>Ingestion</b>	: RNase-Free Water	No specific data.
	2X Brilliant II SYBR®	No specific data.
	Green QPCR Master Mix	
	Reference Dye	No specific data.
	AffinityScript RT/RNase	No specific data.
	Block Enzyme Mixture	
	2X cDNA Synthesis	No specific data.
	Master Mix	
Oligo (dT) Primer	No specific data.	

<b>Skin contact</b>	: RNase-Free Water	No specific data.
	2X Brilliant II SYBR®	No specific data.
	Green QPCR Master Mix	
	Reference Dye	No specific data.
	AffinityScript RT/RNase	No specific data.
	Block Enzyme Mixture	
	2X cDNA Synthesis	No specific data.
	Master Mix	
Oligo (dT) Primer	No specific data.	

<b>Eye contact</b>	: RNase-Free Water	No specific data.
	2X Brilliant II SYBR®	No specific data.
	Green QPCR Master Mix	
	Reference Dye	No specific data.
	AffinityScript RT/RNase	No specific data.
	Block Enzyme Mixture	
	2X cDNA Synthesis	No specific data.
	Master Mix	
Oligo (dT) Primer	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.

## SECTION 11: Toxicological information

### Potential chronic health effects

<b>General</b>	: RNase-Free Water	No known significant effects or critical hazards.
	2X Brilliant II SYBR®	No known significant effects or critical hazards.
	Green QPCR Master Mix	
	Reference Dye	No known significant effects or critical hazards.
	AffinityScript RT/RNase	No known significant effects or critical hazards.
	Block Enzyme Mixture	
	2X cDNA Synthesis	No known significant effects or critical hazards.
	Master Mix	
	Oligo (dT) Primer	No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: RNase-Free Water	No known significant effects or critical hazards.
	2X Brilliant II SYBR®	No known significant effects or critical hazards.
	Green QPCR Master Mix	
	Reference Dye	No known significant effects or critical hazards.
	AffinityScript RT/RNase	No known significant effects or critical hazards.
	Block Enzyme Mixture	
	2X cDNA Synthesis	No known significant effects or critical hazards.
	Master Mix	
	Oligo (dT) Primer	No known significant effects or critical hazards.
<b>Mutagenicity</b>	: RNase-Free Water	No known significant effects or critical hazards.
	2X Brilliant II SYBR®	No known significant effects or critical hazards.
	Green QPCR Master Mix	
	Reference Dye	No known significant effects or critical hazards.
	AffinityScript RT/RNase	No known significant effects or critical hazards.
	Block Enzyme Mixture	
	2X cDNA Synthesis	No known significant effects or critical hazards.
	Master Mix	
	Oligo (dT) Primer	No known significant effects or critical hazards.
<b>Teratogenicity</b>	: RNase-Free Water	No known significant effects or critical hazards.
	2X Brilliant II SYBR®	No known significant effects or critical hazards.
	Green QPCR Master Mix	
	Reference Dye	No known significant effects or critical hazards.
	AffinityScript RT/RNase	No known significant effects or critical hazards.
	Block Enzyme Mixture	
	2X cDNA Synthesis	No known significant effects or critical hazards.
	Master Mix	
	Oligo (dT) Primer	No known significant effects or critical hazards.
<b>Developmental effects</b>	: RNase-Free Water	No known significant effects or critical hazards.
	2X Brilliant II SYBR®	No known significant effects or critical hazards.
	Green QPCR Master Mix	
	Reference Dye	No known significant effects or critical hazards.
	AffinityScript RT/RNase	No known significant effects or critical hazards.
	Block Enzyme Mixture	
	2X cDNA Synthesis	No known significant effects or critical hazards.
	Master Mix	
	Oligo (dT) Primer	No known significant effects or critical hazards.
<b>Fertility effects</b>	: RNase-Free Water	No known significant effects or critical hazards.
	2X Brilliant II SYBR®	No known significant effects or critical hazards.
	Green QPCR Master Mix	
	Reference Dye	No known significant effects or critical hazards.
	AffinityScript RT/RNase	No known significant effects or critical hazards.
	Block Enzyme Mixture	
	2X cDNA Synthesis	No known significant effects or critical hazards.
	Master Mix	
	Oligo (dT) Primer	No known significant effects or critical hazards.
<b>Elimination</b>	:	



## SECTION 12: Ecological information

### 12.1 Toxicity

Conclusion/Summary : Not available.

### 12.2 Persistence and degradability

Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
RNase-Free Water Water	-	-	Readily

### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
RNase-Free Water Water	-1.38	-	low

### 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** : Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 2008/98/EC.

#### 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. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Brilliant II SYBR Green QRT-PCR - AffinityScript Two-Step Master Mix, Part Number 600834

## SECTION 14: Transport 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>	: RNase-Free Water	Not applicable.
	2X Brilliant II SYBR® Green	Not applicable.
	QPCR Master Mix	
	Reference Dye	Not applicable.
	AffinityScript RT/RNase	Not applicable.
	Block Enzyme Mixture	
	2X cDNA Synthesis Master Mix	Not applicable.
	Oligo (dT) Primer	Not applicable.

#### Other EU regulations

**Industrial emissions (integrated pollution prevention and control) - Air** : Listed

#### Ozone depleting substances (1005/2009/EU)

Not listed.

#### Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

#### Seveso Directive

This product is not controlled under the Seveso Directive.

#### International regulations

##### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

##### Montreal Protocol (Annexes A, B, C, E)

Not listed.

##### Stockholm Convention on Persistent Organic Pollutants

Not listed.

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

Not listed.

##### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

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## SECTION 15: Regulatory information

### Inventory list

<b>Australia</b>	: Not determined.
<b>Canada</b>	: Not determined.
<b>China</b>	: All components are listed or exempted.
<b>Europe</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>Thailand</b>	: Not determined.
<b>Turkey</b>	: Not determined.
<b>United States</b>	: Not determined.
<b>Viet Nam</b>	: Not determined.

**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]

Classification	Justification
Not classified.	

### Full text of abbreviated H statements

<b>Reference Dye</b> H315 H319 H335	Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.
<b>2X cDNA Synthesis Master Mix</b> H315 H319 H335	Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

### Full text of classifications [CLP/GHS]

**Brilliant II SYBR Green QRT-PCR - AffinityScript Two-Step Master Mix, Part Number 600834**

## SECTION 16: Other information

### Reference Dye

Eye Irrit. 2, H319  
Skin Irrit. 2, H315  
STOT SE 3, H335

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

### 2X cDNA Synthesis Master Mix

Eye Irrit. 2, H319  
Skin Irrit. 2, H315  
STOT SE 3, H335

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

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