

# SAFETY DATA SHEET

## AffinityScript Multiple Temperature cDNA Synthesis Kit

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

#### 1.1 Product identifier

**Product name** : AffinityScript Multiple Temperature cDNA Synthesis Kit

**UK (GB) REACH Registration number**

Registration number	Legal entity
<b>RNase-Free Water</b> Exempt from REACH: According to the provisions of Article 2(7)(a) and Annex IV of REACH	-

**CAS number** :

RNase-Free Water	7732-18-5
AffinityScript Multiple Temperature Reverse Transcriptase	Not applicable.
10X AffinityScript RT buffer	Not applicable.
RNase Block	Not applicable.
Oligo(dT) Primer	Not applicable.
Random Primers	Not applicable.
100 mM dNTP Mix (25 mM each dNTP)	Not applicable.

**Part no. (chemical kit)** : 200436

**Part no.** :

RNase-Free Water	600164-58
AffinityScript Multiple Temperature Reverse Transcriptase	200436-60
10X AffinityScript RT buffer	200420-54
RNase Block	200820-56
Oligo(dT) Primer	200820-52
Random Primers	200420-53
100 mM dNTP Mix (25 mM each dNTP)	200820-55

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

**Identified uses** :

Analytical reagent.	
RNase-Free Water	1.2 ml
AffinityScript Multiple Temperature Reverse Transcriptase	0.05 ml (50 reactions)
10X AffinityScript RT buffer	0.1 ml
RNase Block	0.025 ml (1000 U 40 U/μl)
Oligo(dT) Primer	0.05 ml (25 μg 0.5 μg/μl)
Random Primers	0.15 ml (15 μg 0.1 μg/μl)
100 mM dNTP Mix (25 mM each dNTP)	0.04 ml

**Uses advised against** : None known.

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

Agilent Technologies LDA UK Ltd.  
 5500 Lakeside Cheadle Royal Business Park,  
 Cheadle, Cheshire, SK8 3GR  
 United Kingdom  
 Tel: +44 (0) 345 712 5292

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

#### 1.4 Emergency telephone number

**AffinityScript Multiple Temperature cDNA Synthesis Kit**

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

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

**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

**Product definition** :  RNase-Free Water Mono-constituent substance  
 AffinityScript Multiple Mixture  
 Temperature Reverse Transcriptase  
 10X AffinityScript RT Mixture  
 buffer  
 RNase Block Mixture  
 Oligo(dT) Primer Mixture  
 Random Primers Mixture  
 100 mM dNTP Mix (25 mM each dNTP) Mixture

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

Not classified.

<input checked="" type="checkbox"/> RNase-Free Water	The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
AffinityScript Multiple Temperature Reverse Transcriptase	The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
10X AffinityScript RT buffer	The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
RNase Block	The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
Oligo(dT) Primer	The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
Random Primers	The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
100 mM dNTP Mix (25 mM each dNTP)	The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

**Ingredients of unknown toxicity** :  AffinityScript Multiple Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 30 - 60%  
 Temperature Reverse Transcriptase  
 10X AffinityScript RT buffer Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 1 - 10%  
 Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 10 - 30%  
 RNase Block Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 30 - 60%  
 100 mM dNTP Mix (25 mM each dNTP) Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 1 - 10%  
 Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 1 - 10%  
 Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 1 - 10%

**Ingredients of unknown ecotoxicity** :  100 mM dNTP Mix (25 mM each dNTP) Contains 5.7% of components with unknown hazards to the aquatic environment

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**

**AffinityScript Multiple Temperature cDNA Synthesis Kit**

**SECTION 2: Hazards identification**

<b>Signal word</b>	: RNase-Free Water AffinityScript Multiple Temperature Reverse Transcriptase 10X AffinityScript RT buffer RNase Block Oligo(dT) Primer Random Primers 100 mM dNTP Mix (25 mM each dNTP)	No signal word. No signal word.  No signal word.  No signal word. No signal word. No signal word. No signal word.
<b>Hazard statements</b>	: RNase-Free Water AffinityScript Multiple Temperature Reverse Transcriptase 10X AffinityScript RT buffer RNase Block Oligo(dT) Primer Random Primers 100 mM dNTP Mix (25 mM each dNTP)	No known significant effects or critical hazards. No known significant effects or critical hazards.  No known significant effects or critical hazards.  No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Precautionary statements</b>		
<b>Prevention</b>	: RNase-Free Water AffinityScript Multiple Temperature Reverse Transcriptase 10X AffinityScript RT buffer RNase Block Oligo(dT) Primer Random Primers 100 mM dNTP Mix (25 mM each dNTP)	Not applicable. Not applicable.  Not applicable.  Not applicable. Not applicable. Not applicable. Not applicable.
<b>Response</b>	: RNase-Free Water AffinityScript Multiple Temperature Reverse Transcriptase 10X AffinityScript RT buffer RNase Block Oligo(dT) Primer Random Primers 100 mM dNTP Mix (25 mM each dNTP)	Not applicable. Not applicable.  Not applicable.  Not applicable. Not applicable. Not applicable. Not applicable.
<b>Storage</b>	: RNase-Free Water AffinityScript Multiple Temperature Reverse Transcriptase 10X AffinityScript RT buffer RNase Block Oligo(dT) Primer Random Primers 100 mM dNTP Mix (25 mM each dNTP)	Not applicable. Not applicable.  Not applicable.  Not applicable. Not applicable. Not applicable. Not applicable.

**AffinityScript Multiple Temperature cDNA Synthesis Kit**

**SECTION 2: Hazards identification**

<b>Disposal</b>	: <input checked="" type="checkbox"/> RNase-Free Water AffinityScript Multiple Temperature Reverse Transcriptase 10X AffinityScript RT buffer RNase Block Oligo(dT) Primer Random Primers 100 mM dNTP Mix (25 mM each dNTP)	Not applicable. Not applicable.  Not applicable.  Not applicable. Not applicable. Not applicable. Not applicable.
<b>Supplemental label elements</b>	: <input checked="" type="checkbox"/> RNase-Free Water AffinityScript Multiple Temperature Reverse Transcriptase 10X AffinityScript RT buffer RNase Block Oligo(dT) Primer Random Primers 100 mM dNTP Mix (25 mM each dNTP)	Not applicable. Safety data sheet available on request.  Not applicable.  Safety data sheet available on request. Not applicable. Not applicable. Not applicable.
<b>Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</b>	: <input checked="" type="checkbox"/> RNase-Free Water AffinityScript Multiple Temperature Reverse Transcriptase 10X AffinityScript RT buffer RNase Block Oligo(dT) Primer Random Primers 100 mM dNTP Mix (25 mM each dNTP)	Not applicable. Not applicable.  Not applicable.  Not applicable. Not applicable. Not applicable. Not applicable.
<b><u>Special packaging requirements</u></b>		
<b>Containers to be fitted with child-resistant fastenings</b>	: <input checked="" type="checkbox"/> RNase-Free Water AffinityScript Multiple Temperature Reverse Transcriptase 10X AffinityScript RT buffer RNase Block Oligo(dT) Primer Random Primers 100 mM dNTP Mix (25 mM each dNTP)	Not applicable. Not applicable.  Not applicable.  Not applicable. Not applicable. Not applicable. Not applicable.
<b>Tactile warning of danger</b>	: <input checked="" type="checkbox"/> RNase-Free Water AffinityScript Multiple Temperature Reverse Transcriptase 10X AffinityScript RT buffer RNase Block Oligo(dT) Primer Random Primers 100 mM dNTP Mix (25 mM each dNTP)	Not applicable. Not applicable.  Not applicable.  Not applicable. Not applicable. Not applicable. Not applicable.

**2.3 Other hazards**

**AffinityScript Multiple Temperature cDNA Synthesis Kit**

**SECTION 2: Hazards identification**

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

PBT	P	B	T	vPvB	vP	vB
<b>RNase-Free Water</b>						
Not applicable (Inorganic)	N/A	N/A	N/A	Not applicable (Inorganic)	N/A	N/A

**AffinityScript Multiple Temperature Reverse Transcriptase** This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**10X AffinityScript RT buffer** This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**RNase Block** This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**Oligo(dT) Primer** This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**Random Primers** This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**100 mM dNTP Mix (25 mM each dNTP)** This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification

<b>RNase-Free Water</b>	None known.
<b>AffinityScript Multiple Temperature Reverse Transcriptase</b>	None known.
<b>10X AffinityScript RT buffer</b>	None known.
<b>RNase Block</b>	None known.
<b>Oligo(dT) Primer</b>	None known.
<b>Random Primers</b>	None known.
<b>100 mM dNTP Mix (25 mM each dNTP)</b>	None known.

**SECTION 3: Composition/information on ingredients**

<b>3.1 Substances</b>	<b>RNase-Free Water</b>	Mono-constituent substance
	<b>AffinityScript Multiple Temperature Reverse Transcriptase</b>	Mixture
	<b>10X AffinityScript RT buffer</b>	Mixture
	<b>RNase Block</b>	Mixture
	<b>Oligo(dT) Primer</b>	Mixture
	<b>Random Primers</b>	Mixture
	<b>100 mM dNTP Mix (25 mM each dNTP)</b>	Mixture

Product/ingredient name	Identifiers	%	Classification	Type
<b>RNase-Free Water</b> water	UK (GB) REACH #: Annex IV REACH #: Annex IV EC: 231-791-2 CAS: 7732-18-5	100	Not classified.	[1]
<b>AffinityScript Multiple Temperature Reverse Transcriptase</b> Glycerol	UK (GB) REACH #: Annex V REACH #: Annex V EC: 200-289-5 CAS: 56-81-5	≥50 - ≤75	Not classified.	[1]
<b>RNase Block</b> Glycerol	UK (GB) REACH #: Annex V REACH #: Annex V EC: 200-289-5 CAS: 56-81-5	≥50 - ≤75	Not classified.	[1]

**AffinityScript Multiple Temperature cDNA Synthesis Kit**

**SECTION 3: Composition/information on ingredients**

			<b>See Section 16 for the full text of the H statements declared above.</b>
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There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

Type

RNase-Free Water	[1] Constituent
AffinityScript Multiple Temperature Reverse Transcriptase	[1] Substance with a workplace exposure limit
RNase Block	[1] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

**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.
AffinityScript Multiple Temperature Reverse Transcriptase	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.
RNase Block	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.
Random Primers	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 dNTP Mix (25 mM each dNTP)	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.
AffinityScript Multiple Temperature Reverse Transcriptase	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.
RNase Block	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Oligo(dT) Primer	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Random Primers	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
100 mM dNTP Mix (25 mM each dNTP)	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.

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**SECTION 4: First aid measures**

<b>Skin contact</b>	: RNase-Free Water	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	AffinityScript Multiple Temperature Reverse Transcriptase	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.
	RNase Block	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.
	Random Primers	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	100 mM dNTP Mix (25 mM each dNTP)	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
<b>Ingestion</b>	: RNase-Free Water	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	AffinityScript Multiple Temperature Reverse Transcriptase	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	10X AffinityScript RT buffer	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	RNase Block	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	Oligo(dT) Primer	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	Random Primers	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	100 mM dNTP Mix (25 mM each dNTP)	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
<b>Protection of first-aiders</b>	: RNase-Free Water	No action shall be taken involving any personal risk or without suitable training.
	AffinityScript Multiple Temperature Reverse Transcriptase	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.

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**SECTION 4: First aid measures**

RNase Block	No action shall be taken involving any personal risk or without suitable training.
Oligo(dT) Primer	No action shall be taken involving any personal risk or without suitable training.
Random Primers	No action shall be taken involving any personal risk or without suitable training.
100 mM dNTP Mix (25 mM each dNTP)	No action shall be taken involving any personal risk or without suitable training.

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

Over-exposure signs/symptoms

<b>Eye contact</b>	:	<input checked="" type="checkbox"/> RNase-Free Water	No specific data.
		AffinityScript Multiple Temperature Reverse Transcriptase	No specific data.
		10X AffinityScript RT buffer	No specific data.
		RNase Block	No specific data.
		Oligo(dT) Primer	No specific data.
<b>Inhalation</b>	:	<input checked="" type="checkbox"/> RNase-Free Water	No specific data.
		AffinityScript Multiple Temperature Reverse Transcriptase	No specific data.
		10X AffinityScript RT buffer	No specific data.
		RNase Block	No specific data.
		Oligo(dT) Primer	No specific data.
<b>Skin contact</b>	:	<input checked="" type="checkbox"/> RNase-Free Water	No specific data.
		AffinityScript Multiple Temperature Reverse Transcriptase	No specific data.
		10X AffinityScript RT buffer	No specific data.
		RNase Block	No specific data.
		Oligo(dT) Primer	No specific data.
<b>Ingestion</b>	:	<input checked="" type="checkbox"/> RNase-Free Water	No specific data.
		AffinityScript Multiple Temperature Reverse Transcriptase	No specific data.
		10X AffinityScript RT buffer	No specific data.
		RNase Block	No specific data.
		Oligo(dT) Primer	No specific data.

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



**AffinityScript Multiple Temperature cDNA Synthesis Kit**

**SECTION 4: First aid measures**

<b>Notes to physician</b>	: RNase-Free Water AffinityScript Multiple Temperature Reverse Transcriptase 10X AffinityScript RT buffer RNase Block Oligo(dT) Primer Random Primers 100 mM dNTP Mix (25 mM each dNTP)	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. 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. 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. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
<b>Specific treatments</b>	: RNase-Free Water AffinityScript Multiple Temperature Reverse Transcriptase 10X AffinityScript RT buffer RNase Block Oligo(dT) Primer Random Primers 100 mM dNTP Mix (25 mM each dNTP)	No specific treatment. No specific treatment. No specific treatment. No specific treatment. No specific treatment. No specific treatment. No specific treatment.

**SECTION 5: Firefighting measures**

**5.1 Extinguishing media**

<b>Suitable extinguishing media</b>	: RNase-Free Water AffinityScript Multiple Temperature Reverse Transcriptase 10X AffinityScript RT buffer RNase Block Oligo(dT) Primer Random Primers 100 mM dNTP Mix (25 mM each dNTP)	Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	: RNase-Free Water AffinityScript Multiple Temperature Reverse Transcriptase 10X AffinityScript RT buffer RNase Block Oligo(dT) Primer Random Primers 100 mM dNTP Mix (25 mM each dNTP)	None known. None known. None known. None known. None known. None known. None known.

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

**AffinityScript Multiple Temperature cDNA Synthesis Kit**

**SECTION 5: Firefighting measures**

<b>Hazards from the substance or mixture</b>	:	<input checked="" type="checkbox"/> RNase-Free Water	In a fire or if heated, a pressure increase will occur and the container may burst.
		AffinityScript Multiple Temperature Reverse Transcriptase	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.
		RNase Block	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.
		Random Primers	In a fire or if heated, a pressure increase will occur and the container may burst.
<b>Hazardous combustion products</b>	:	<input checked="" type="checkbox"/> RNase-Free Water	No specific data.
		AffinityScript Multiple Temperature Reverse Transcriptase	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
		RNase Block	Decomposition products may include the following materials: carbon dioxide carbon monoxide
		Oligo(dT) Primer	No specific data.
		Random Primers	No specific data.
		100 mM dNTP Mix (25 mM each dNTP)	Decomposition products may include the following materials:  carbon dioxide carbon monoxide nitrogen oxides phosphorus oxides

**5.3 Advice for firefighters**

<b>Special protective actions for fire-fighters</b>	:	<input checked="" type="checkbox"/> 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.
		AffinityScript Multiple Temperature Reverse Transcriptase	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.
		RNase Block	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.
		Random Primers	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 dNTP Mix (25 mM each dNTP)	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 Multiple Temperature cDNA Synthesis Kit**

**SECTION 5: Firefighting measures**

**Special protective equipment for fire-fighters**

: 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.
AffinityScript Multiple Temperature Reverse Transcriptase	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
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.
RNase Block	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
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.
Random Primers	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
100 mM dNTP Mix (25 mM each dNTP)	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

**SECTION 6: Accidental release measures**

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

**For non-emergency personnel**

: 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.
AffinityScript Multiple Temperature Reverse Transcriptase	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 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.
RNase Block	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.
Random Primers	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 dNTP Mix (25 mM each dNTP)	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 Multiple Temperature cDNA Synthesis Kit**

**SECTION 6: Accidental release measures**

**For emergency responders**

: 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".
AffinityScript Multiple Temperature Reverse Transcriptase	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".
RNase Block	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".
Random Primers	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 dNTP Mix (25 mM each dNTP)	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**

: 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).
AffinityScript Multiple Temperature Reverse Transcriptase	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).
RNase Block	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).
Random Primers	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 dNTP Mix (25 mM each dNTP)	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**

**AffinityScript Multiple Temperature cDNA Synthesis Kit**

**SECTION 6: Accidental release measures**

<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.
	AffinityScript Multiple Temperature Reverse Transcriptase	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.
	RNase Block	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.
	Random Primers	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 dNTP Mix (25 mM each dNTP)	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>	: RNase-Free Water	Put on appropriate personal protective equipment (see Section 8).
	AffinityScript Multiple Temperature Reverse Transcriptase	Put on appropriate personal protective equipment (see Section 8).
	10X AffinityScript RT buffer	Put on appropriate personal protective equipment (see Section 8).
	RNase Block	Put on appropriate personal protective equipment (see Section 8).
	Oligo(dT) Primer	Put on appropriate personal protective equipment (see Section 8).
	Random Primers	Put on appropriate personal protective equipment (see Section 8).
	100 mM dNTP Mix (25 mM each dNTP)	Put on appropriate personal protective equipment (see Section 8).

**AffinityScript Multiple Temperature cDNA Synthesis Kit**

**SECTION 7: Handling and storage**

**Advice on general occupational hygiene**

: 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.
AffinityScript Multiple Temperature Reverse Transcriptase	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.
RNase Block	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.
Random Primers	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.

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

**Storage**

: 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 before handling or use.
AffinityScript Multiple Temperature Reverse Transcriptase	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**

10X AffinityScript RT buffer	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.
RNase Block	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.
Random Primers	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.
100 mM dNTP Mix (25 mM each dNTP)	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.
AffinityScript Multiple Temperature Reverse Transcriptase	Industrial applications, Professional applications.
10X AffinityScript RT buffer	Industrial applications, Professional applications.
RNase Block	Industrial applications, Professional applications.
Oligo(dT) Primer	Industrial applications, Professional applications.
Random Primers	Industrial applications, Professional applications.

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**SECTION 7: Handling and storage**

	100 mM dNTP Mix (25 mM each dNTP)	Industrial applications, Professional applications.
<b>Industrial sector specific solutions</b>	<input checked="" type="checkbox"/> RNase-Free Water	Not available.
	AffinityScript Multiple Temperature Reverse Transcriptase	Not available.
	10X AffinityScript RT buffer	Not available.
	RNase Block	Not available.
	Oligo(dT) Primer	Not available.
	Random Primers	Not available.
	100 mM dNTP Mix (25 mM each dNTP)	Not available.

**SECTION 8: Exposure controls/personal protection**

**8.1 Control parameters**

Occupational exposure limits

Product/ingredient name	Exposure limit values
<input checked="" type="checkbox"/> AffinityScript Multiple Temperature Reverse Transcriptase Glycerol	<b>EH40/2005 WELs (United Kingdom (UK), 1/2020).</b> TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Mist
<b>RNase Block</b> Glycerol	<b>EH40/2005 WELs (United Kingdom (UK), 1/2020).</b> TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Mist

Biological exposure indices

No exposure indices known.

**Recommended monitoring procedures**

Reference should be made to appropriate monitoring standards. 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.

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.



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**SECTION 8: Exposure controls/personal protection**

- 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**

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

**9.1 Information on basic physical and chemical properties**

Appearance

- |                        |   |   |
|------------------------|---|---|
| <b>Physical state</b>  | : RNase-Free Water<br>AffinityScript Multiple<br>Temperature Reverse<br>Transcriptase<br>10X AffinityScript RT<br>buffer<br>RNase Block<br>Oligo(dT) Primer<br>Random Primers<br>100 mM dNTP Mix (25<br>mM each dNTP) | Liquid.<br>Liquid.<br><br>Liquid.<br><br>Liquid.<br>Liquid.<br>Liquid.<br>Liquid.   |
| <b>Colour</b>          | : RNase-Free Water<br>AffinityScript Multiple<br>Temperature Reverse<br>Transcriptase<br>10X AffinityScript RT<br>buffer<br>RNase Block<br>Oligo(dT) Primer<br>Random Primers<br>100 mM dNTP Mix (25<br>mM each dNTP) | Colourless.<br>Not available.<br><br>Not available.<br><br>Not available.<br>Not available.<br>Not available.<br>Not available. |
| <b>Odour</b>           | : RNase-Free Water<br>AffinityScript Multiple<br>Temperature Reverse<br>Transcriptase<br>10X AffinityScript RT<br>buffer<br>RNase Block<br>Oligo(dT) Primer<br>Random Primers<br>100 mM dNTP Mix (25<br>mM each dNTP) | Odourless.<br>Not available.<br><br>Not available.<br><br>Not available.<br>Not available.<br>Not available.<br>Not available.  |
| <b>Odour threshold</b> | : RNase-Free Water<br>AffinityScript Multiple<br>Temperature Reverse<br>Transcriptase<br>10X AffinityScript RT<br>buffer<br>RNase Block<br>Oligo(dT) Primer   | Not available.<br>Not available.<br><br>Not available.<br><br>Not available.<br>Not available.                                  |

**AffinityScript Multiple Temperature cDNA Synthesis Kit**

**SECTION 9: Physical and chemical properties**

**Melting point/freezing point** :

- Random Primers Not available.
- 100 mM dNTP Mix (25 mM each dNTP) Not available.
- RNase-Free Water 0°C
- AffinityScript Multiple Temperature Reverse Transcriptase Not available.
- 10X AffinityScript RT buffer Not available.
- RNase Block Not available.
- Oligo(dT) Primer 0°C
- Random Primers 0°C
- 100 mM dNTP Mix (25 mM each dNTP) Not available.

**Initial boiling point and boiling range** :

- RNase-Free Water 100°C
- AffinityScript Multiple Temperature Reverse Transcriptase Not available.
- 10X AffinityScript RT buffer Not available.
- RNase Block Not available.
- Oligo(dT) Primer 100°C
- Random Primers 100°C
- 100 mM dNTP Mix (25 mM each dNTP) Not available.

**Flammability** :

- RNase-Free Water Not applicable.
- AffinityScript Multiple Temperature Reverse Transcriptase Not applicable.
- 10X AffinityScript RT buffer Not applicable.
- RNase Block Not applicable.
- Oligo(dT) Primer Not applicable.
- Random Primers Not applicable.
- 100 mM dNTP Mix (25 mM each dNTP) Not applicable.

**Upper/lower flammability or explosive limits** :

- RNase-Free Water Not available.
- AffinityScript Multiple Temperature Reverse Transcriptase Not available.
- 10X AffinityScript RT buffer Not available.
- RNase Block Not available.
- Oligo(dT) Primer Not available.
- Random Primers Not available.
- 100 mM dNTP Mix (25 mM each dNTP) Not available.

**Flash point** :

Ingredient name	Closed cup		Open cup	
	°C	Method	°C	Method
<input checked="" type="checkbox"/> AffinityScript Multiple Temperature Reverse Transcriptase				
glycerol	-	-	177	-
<b>RNase Block</b>				
glycerol	-	-	177	-

**Auto-ignition temperature** :

**AffinityScript Multiple Temperature cDNA Synthesis Kit**

**SECTION 9: Physical and chemical properties**

Ingredient name	°C	Method
<b>AffinityScript Multiple Temperature Reverse Transcriptase</b>		
glycerol	370	-
<b>RNase Block</b>		
glycerol	370	-

**Decomposition temperature**

- : **RNase-Free Water** Not available.
- AffinityScript Multiple Temperature Reverse Transcriptase** Not available.
- 10X AffinityScript RT buffer** Not available.
- RNase Block** Not available.
- Oligo(dT) Primer** Not available.
- Random Primers** Not available.
- 100 mM dNTP Mix (25 mM each dNTP)** Not available.

**pH**

- : **RNase-Free Water** 7
- AffinityScript Multiple Temperature Reverse Transcriptase** 8
- 10X AffinityScript RT buffer** 8.3
- RNase Block** 7.6
- Oligo(dT) Primer** 7.5
- Random Primers** 7.5
- 100 mM dNTP Mix (25 mM each dNTP)** 7.5

**Viscosity**

- : **RNase-Free Water** Not available.
- AffinityScript Multiple Temperature Reverse Transcriptase** Not available.
- 10X AffinityScript RT buffer** Not available.
- RNase Block** Not available.
- Oligo(dT) Primer** Not available.
- Random Primers** Not available.
- 100 mM dNTP Mix (25 mM each dNTP)** Not available.

**Solubility(ies)**

Media	Result
<b>RNase-Free Water</b>	
water	Soluble
<b>AffinityScript Multiple Temperature Reverse Transcriptase</b>	
water	Soluble
<b>10X AffinityScript RT buffer</b>	
water	Soluble
<b>RNase Block</b>	
water	Soluble
<b>Oligo(dT) Primer</b>	
water	Soluble
<b>Random Primers</b>	
water	Soluble
<b>100 mM dNTP Mix (25 mM each dNTP)</b>	
water	Soluble

**AffinityScript Multiple Temperature cDNA Synthesis Kit**

**SECTION 9: Physical and chemical properties**

**Partition coefficient: n-octanol/water** :  RNase-Free Water -1.38  
 AffinityScript Multiple Temperature Reverse Transcriptase Not applicable.  
 10X AffinityScript RT buffer Not applicable.  
 RNase Block Not applicable.  
 Oligo(dT) Primer Not applicable.  
 Random Primers Not applicable.  
 100 mM dNTP Mix (25 mM each dNTP) Not applicable.

**Vapour pressure** :  RNase-Free Water 2.3 kPa (17.5 mm Hg) [room temperature]  
 12.3 kPa (92.258 mm Hg) [50°C]

Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
<b>AffinityScript Multiple Temperature Reverse Transcriptase</b>						
water	17.5	2.3	-	92.258	12.3	-
glycerol	0.000075	0.00001	-	0.0025	0.00033	-
<b>10X AffinityScript RT buffer</b>						
water	17.5	2.3	-	92.258	12.3	-
<b>RNase Block</b>						
water	17.5	2.3	-	92.258	12.3	-
glycerol	0.000075	0.00001	-	0.0025	0.00033	-
<b>Oligo(dT) Primer</b>						
water	17.5	2.3	-	92.258	12.3	-
<b>Random Primers</b>						
water	17.5	2.3	-	92.258	12.3	-
<b>100 mM dNTP Mix (25 mM each dNTP)</b>						
water	17.5	2.3	-	92.258	12.3	-

**Evaporation rate** :  RNase-Free Water Not available.  
 AffinityScript Multiple Temperature Reverse Transcriptase Not available.  
 10X AffinityScript RT buffer Not available.  
 RNase Block Not available.  
 Oligo(dT) Primer Not available.

**AffinityScript Multiple Temperature cDNA Synthesis Kit**

**SECTION 9: Physical and chemical properties**

	Random Primers	Not available.
	100 mM dNTP Mix (25 mM each dNTP)	Not available.
<b>Relative density</b>	: RNase-Free Water	1
	AffinityScript Multiple Temperature Reverse Transcriptase	Not available.
	10X AffinityScript RT buffer	Not available.
	RNase Block	Not available.
	Oligo(dT) Primer	Not available.
	Random Primers	Not available.
	100 mM dNTP Mix (25 mM each dNTP)	Not available.
<b>Vapour density</b>	: RNase-Free Water	0.62 [Air = 1]
	AffinityScript Multiple Temperature Reverse Transcriptase	Not available.
	10X AffinityScript RT buffer	Not available.
	RNase Block	Not available.
	Oligo(dT) Primer	Not available.
	Random Primers	Not available.
	100 mM dNTP Mix (25 mM each dNTP)	Not available.
<b>Explosive properties</b>	: RNase-Free Water	Not available.
	AffinityScript Multiple Temperature Reverse Transcriptase	Not available.
	10X AffinityScript RT buffer	Not available.
	RNase Block	Not available.
	Oligo(dT) Primer	Not available.
	Random Primers	Not available.
	100 mM dNTP Mix (25 mM each dNTP)	Not available.
<b>Oxidising properties</b>	: RNase-Free Water	Not available.
	AffinityScript Multiple Temperature Reverse Transcriptase	Not available.
	10X AffinityScript RT buffer	Not available.
	RNase Block	Not available.
	Oligo(dT) Primer	Not available.
	Random Primers	Not available.
	100 mM dNTP Mix (25 mM each dNTP)	Not available.
<b>Particle characteristics</b>		
<b>Median particle size</b>	: RNase-Free Water	Not applicable.
	AffinityScript Multiple Temperature Reverse Transcriptase	Not applicable.
	10X AffinityScript RT buffer	Not applicable.
	RNase Block	Not applicable.
	Oligo(dT) Primer	Not applicable.
	Random Primers	Not applicable.
	100 mM dNTP Mix (25 mM each dNTP)	Not applicable.

**9.2 Other information**

**AffinityScript Multiple Temperature cDNA Synthesis Kit**

**SECTION 9: Physical and chemical properties**

No additional information.

**SECTION 10: Stability and reactivity**

<b>10.1 Reactivity</b>	: <input checked="" type="checkbox"/> RNase-Free Water  AffinityScript Multiple Temperature Reverse Transcriptase 10X AffinityScript RT buffer RNase Block  Oligo(dT) Primer  Random Primers  100 mM dNTP Mix (25 mM each dNTP)	No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients.
<b>10.2 Chemical stability</b>	: <input checked="" type="checkbox"/> RNase-Free Water AffinityScript Multiple Temperature Reverse Transcriptase 10X AffinityScript RT buffer RNase Block Oligo(dT) Primer Random Primers 100 mM dNTP Mix (25 mM each dNTP)	The product is stable. The product is stable.  The product is stable.  The product is stable. The product is stable. The product is stable. The product is stable.
<b>10.3 Possibility of hazardous reactions</b>	: <input checked="" type="checkbox"/> RNase-Free Water  AffinityScript Multiple Temperature Reverse Transcriptase 10X AffinityScript RT buffer RNase Block  Oligo(dT) Primer  Random Primers  100 mM dNTP Mix (25 mM each dNTP)	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.  Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.
<b>10.4 Conditions to avoid</b>	: <input checked="" type="checkbox"/> RNase-Free Water AffinityScript Multiple Temperature Reverse Transcriptase 10X AffinityScript RT buffer RNase Block Oligo(dT) Primer Random Primers 100 mM dNTP Mix (25 mM each dNTP)	No specific data. No specific data.  No specific data.  No specific data. No specific data. No specific data. No specific data.

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**SECTION 10: Stability and reactivity**

<b>10.5 Incompatible materials</b>	: <input checked="" type="checkbox"/> RNase-Free Water AffinityScript Multiple Temperature Reverse Transcriptase 10X AffinityScript RT buffer RNase Block Oligo(dT) Primer Random Primers 100 mM dNTP Mix (25 mM each dNTP)	May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials.  May react or be incompatible with oxidising materials.  May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials.
<b>10.6 Hazardous decomposition products</b>	: <input checked="" type="checkbox"/> RNase-Free Water  AffinityScript Multiple Temperature Reverse Transcriptase 10X AffinityScript RT buffer RNase Block  Oligo(dT) Primer  Random Primers  100 mM dNTP Mix (25 mM each dNTP)	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced.  Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**SECTION 11: Toxicological information**

**11.1 Information on toxicological effects**

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
<input checked="" type="checkbox"/> AffinityScript Multiple Temperature Reverse Transcriptase Glycerol	LD50 Oral	Rat	12600 mg/kg	-
<input checked="" type="checkbox"/> RNase Block Glycerol	LD50 Oral	Rat	12600 mg/kg	-

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
<input checked="" type="checkbox"/> AffinityScript Multiple Temperature Reverse Transcriptase Glycerol	12600	N/A	N/A	N/A	N/A
<input checked="" type="checkbox"/> RNase Block Glycerol	12600	N/A	N/A	N/A	N/A

Irritation/Corrosion

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**SECTION 11: Toxicological information**

Product/ingredient name	Result	Species	Score	Exposure	Observation
<b>AffinityScript Multiple Temperature Reverse Transcriptase</b> Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
<b>RNase Block</b> Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-

**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)**

Not available.

**Specific target organ toxicity (repeated exposure)**

Not available.

**Aspiration hazard**

Not available.

**Information on likely routes of exposure**

<b>RNase-Free Water</b>	Not available.
<b>AffinityScript Multiple Temperature Reverse Transcriptase</b>	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
<b>10X AffinityScript RT buffer</b>	Not available.
<b>RNase Block</b>	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
<b>Oligo(dT) Primer</b>	Not available.
<b>Random Primers</b>	Not available.
<b>100 mM dNTP Mix (25 mM each dNTP)</b>	Not available.

**Potential acute health effects**

**Inhalation**

<b>RNase-Free Water</b>	No known significant effects or critical hazards.
<b>AffinityScript Multiple Temperature Reverse Transcriptase</b>	No known significant effects or critical hazards.
<b>10X AffinityScript RT buffer</b>	No known significant effects or critical hazards.
<b>RNase Block</b>	No known significant effects or critical hazards.
<b>Oligo(dT) Primer</b>	No known significant effects or critical hazards.
<b>Random Primers</b>	No known significant effects or critical hazards.
<b>100 mM dNTP Mix (25 mM each dNTP)</b>	No known significant effects or critical hazards.



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**SECTION 11: Toxicological information**

<b>Ingestion</b>	: <input checked="" type="checkbox"/> RNase-Free Water AffinityScript Multiple Temperature Reverse Transcriptase 10X AffinityScript RT buffer RNase Block Oligo(dT) Primer Random Primers 100 mM dNTP Mix (25 mM each dNTP)	No known significant effects or critical hazards. No known significant effects or critical hazards.  No known significant effects or critical hazards.  No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Skin contact</b>	: <input checked="" type="checkbox"/> RNase-Free Water AffinityScript Multiple Temperature Reverse Transcriptase 10X AffinityScript RT buffer RNase Block Oligo(dT) Primer Random Primers 100 mM dNTP Mix (25 mM each dNTP)	No known significant effects or critical hazards. No known significant effects or critical hazards.  No known significant effects or critical hazards.  No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Eye contact</b>	: <input checked="" type="checkbox"/> RNase-Free Water AffinityScript Multiple Temperature Reverse Transcriptase 10X AffinityScript RT buffer RNase Block Oligo(dT) Primer Random Primers 100 mM dNTP Mix (25 mM each dNTP)	No known significant effects or critical hazards. No known significant effects or critical hazards.  No known significant effects or critical hazards.  No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

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

<b>Inhalation</b>	: <input checked="" type="checkbox"/> RNase-Free Water AffinityScript Multiple Temperature Reverse Transcriptase 10X AffinityScript RT buffer RNase Block Oligo(dT) Primer Random Primers 100 mM dNTP Mix (25 mM each dNTP)	No specific data. No specific data.  No specific data.  No specific data. No specific data. No specific data. No specific data.
<b>Ingestion</b>	: <input checked="" type="checkbox"/> RNase-Free Water AffinityScript Multiple Temperature Reverse Transcriptase 10X AffinityScript RT buffer RNase Block Oligo(dT) Primer Random Primers 100 mM dNTP Mix (25 mM each dNTP)	No specific data. No specific data.  No specific data.  No specific data. No specific data. No specific data. No specific data.

**AffinityScript Multiple Temperature cDNA Synthesis Kit**

**SECTION 11: Toxicological information**

<b>Skin contact</b>	:	<input checked="" type="checkbox"/> RNase-Free Water	No specific data.	
		AffinityScript Multiple	No specific data.	
		Temperature Reverse Transcriptase		
		10X AffinityScript RT buffer	No specific data.	
		RNase Block	No specific data.	
		Oligo(dT) Primer	No specific data.	
		Random Primers	No specific data.	
		100 mM dNTP Mix (25 mM each dNTP)	No specific data.	
	<b>Eye contact</b>	:	<input checked="" type="checkbox"/> RNase-Free Water	No specific data.
			AffinityScript Multiple	No specific data.
		Temperature Reverse Transcriptase		
		10X AffinityScript RT buffer	No specific data.	
		RNase Block	No specific data.	
		Oligo(dT) Primer	No specific data.	
		Random Primers	No specific data.	
		100 mM dNTP Mix (25 mM each dNTP)	No specific data.	

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

<b>Potential immediate effects</b>	:	Not available.
<b>Potential delayed effects</b>	:	Not available.

Long term exposure

<b>Potential immediate effects</b>	:	Not available.
<b>Potential delayed effects</b>	:	Not available.

Potential chronic health effects

**Conclusion/Summary** : Not available.

<b>General</b>	:	<input checked="" type="checkbox"/> RNase-Free Water	No known significant effects or critical hazards.
		AffinityScript Multiple	No known significant effects or critical hazards.
		Temperature Reverse Transcriptase	
		10X AffinityScript RT buffer	No known significant effects or critical hazards.
		RNase Block	No known significant effects or critical hazards.
		Oligo(dT) Primer	No known significant effects or critical hazards.
		Random Primers	No known significant effects or critical hazards.
		100 mM dNTP Mix (25 mM each dNTP)	No known significant effects or critical hazards.

<b>Carcinogenicity</b>	:	<input checked="" type="checkbox"/> RNase-Free Water	No known significant effects or critical hazards.
		AffinityScript Multiple	No known significant effects or critical hazards.
		Temperature Reverse Transcriptase	
		10X AffinityScript RT buffer	No known significant effects or critical hazards.
		RNase Block	No known significant effects or critical hazards.
		Oligo(dT) Primer	No known significant effects or critical hazards.
		Random Primers	No known significant effects or critical hazards.
		100 mM dNTP Mix (25 mM each dNTP)	No known significant effects or critical hazards.

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<b>Mutagenicity</b>	: <input checked="" type="checkbox"/> RNase-Free Water AffinityScript Multiple Temperature Reverse Transcriptase 10X AffinityScript RT buffer RNase Block Oligo(dT) Primer Random Primers 100 mM dNTP Mix (25 mM each dNTP)	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Reproductive toxicity</b>	: <input checked="" type="checkbox"/> RNase-Free Water AffinityScript Multiple Temperature Reverse Transcriptase 10X AffinityScript RT buffer RNase Block Oligo(dT) Primer Random Primers 100 mM dNTP Mix (25 mM each dNTP)	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

**SECTION 12: Ecological information**

**12.1 Toxicity**

Product/ingredient name	Result	Species	Exposure
<input checked="" type="checkbox"/> AffinityScript Multiple Temperature Reverse Transcriptase Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Trout - <i>Oncorhynchus mykiss</i>	96 hours
<b>RNase Block</b> Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Trout - <i>Oncorhynchus mykiss</i>	96 hours

**Conclusion/Summary** : Not available.

**12.2 Persistence and degradability**

Product/ingredient name	Test	Result	Dose	Inoculum
<input checked="" type="checkbox"/> AffinityScript Multiple Temperature Reverse Transcriptase Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-
<b>RNase Block</b> Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-

**Conclusion/Summary** : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
<input checked="" type="checkbox"/> RNase-Free Water water	-	-	Readily

**AffinityScript Multiple Temperature cDNA Synthesis Kit**

**SECTION 12: Ecological information**

**12.3 Bioaccumulative potential**

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<b>RNase-Free Water</b> water	-1.38	-	Low
<b>AffinityScript Multiple Temperature Reverse Transcriptase</b> Glycerol	-1.76	-	Low
<b>RNase Block</b> Glycerol	-1.76	-	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**

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
<b>RNase-Free Water</b> water	Not applicable (Inorganic)	N/A	N/A	N/A	Not applicable (Inorganic)	N/A	N/A

**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.

**SECTION 14: Transport information**

**AffinityScript Multiple Temperature cDNA Synthesis Kit**

**SECTION 14: Transport information**

	ADR/RID	IMDG	IATA
14.1 UN number	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-
14.3 Transport hazard class(es)	-	-	-
14.4 Packing group	-	-	-
14.5 Environmental hazards	No.	No.	No.

**Additional information**

**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 IMO instruments** : Not available.

**SECTION 15: Regulatory information**

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture UK (GB)/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.

**Ozone depleting substances**

Not listed.

**Prior Informed Consent (PIC)**

Not listed.

**Persistent Organic Pollutants**

Not listed.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles**

No listed substance

<b>Label</b>	: <input checked="" type="checkbox"/> RNase-Free Water	Not applicable.
	AffinityScript Multiple Temperature Reverse Transcriptase	Not applicable.
	10X AffinityScript RT buffer	Not applicable.
	RNase Block	Not applicable.
	Oligo(dT) Primer	Not applicable.
	Random Primers	Not applicable.
	100 mM dNTP Mix (25 mM	Not applicable.

**AffinityScript Multiple Temperature cDNA Synthesis Kit**

**SECTION 15: Regulatory information**

each dNTP)

**Seveso Directive**

This product is not controlled under the Seveso Directive.

**EU regulations**

**Industrial emissions (integrated pollution prevention and control) - Air** : Not listed

**Industrial emissions (integrated pollution prevention and control) - Water** : Not listed

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

**International regulations**

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

Not listed.

**Montreal Protocol**

Not listed.

**Stockholm Convention on Persistent Organic Pollutants**

Not listed.

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

Not listed.

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

Not listed.

**Inventory list**

**United States** : All components are active or exempted.

**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]  
 DMEL = Derived Minimal Effect Level  
 DNEL = Derived No Effect Level  
 EUH statement = CLP-specific Hazard statement  
 N/A = Not available  
 PBT = Persistent, Bioaccumulative and Toxic  
 PNEC = Predicted No Effect Concentration  
 RRN = REACH Registration Number  
 vPvB = Very Persistent and Very Bioaccumulative

**Procedure used to derive the classification**

Classification	Justification
Not classified.	

**Full text of abbreviated H statements**

Not applicable.

**Full text of classifications**

Not applicable.

**Date of issue/ Date of revision** : 22/05/2024

**SECTION 16: Other information**

**Date of previous issue** : 24/05/2021

**Version** : 4

**Notice to reader**

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