

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	
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 Deutschland GmbH
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

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	Mixture
		mM each dNTP)	

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

Not classified.

RNase-Free Water	The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.
AffinityScript Multiple Temperature Reverse Transcriptase	The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.
10X AffinityScript RT buffer	The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.
RNase Block	The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.
Oligo(dT) Primer	The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.
Random Primers	The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.
100 mM dNTP Mix (25 mM each dNTP)	The product is not classified as hazardous according to Regulation (EC) 1272/2008 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

Signal word	:	RNase-Free Water	No signal word.
		AffinityScript Multiple	No signal word.
		Temperature Reverse	
		Transcriptase	
		10X AffinityScript RT	No signal word.
		buffer	
		RNase Block	No signal word.
		Oligo(dT) Primer	No signal word.
		Random Primers	No signal word.
		100 mM dNTP Mix (25	No signal word.
		mM each dNTP)	

SECTION 2: Hazards identification

Hazard statements	: 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	No known significant effects or critical hazards.
	buffer	
	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	No known significant effects or critical hazards.
	mM each dNTP)	

Precautionary statements

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

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

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

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

AffinityScript Multiple Temperature cDNA Synthesis Kit

SECTION 2: Hazards identification

Supplemental label elements : RNase-Free Water Not applicable.
 AffinityScript Multiple Not applicable.
 Temperature Reverse Transcriptase
 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.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : RNase-Free Water Not applicable.
 AffinityScript Multiple Not applicable.
 Temperature Reverse Transcriptase
 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.

Special packaging requirements

Tactile warning of danger : RNase-Free Water Not applicable.
 AffinityScript Multiple Not applicable.
 Temperature Reverse Transcriptase
 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.

2.3 Other hazards

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

	PBT	P	B	T	vPvB	vP	vB
RNase-Free Water							
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.

AffinityScript Multiple Temperature cDNA Synthesis Kit

SECTION 2: Hazards identification

Other hazards which do not result in classification :

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

SECTION 3: Composition/information on ingredients

3.1 Substances :

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

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
RNase-Free Water water	REACH #: Annex IV EC: 231-791-2 CAS: 7732-18-5	100	Not classified.	-	[1]
AffinityScript Multiple Temperature Reverse Transcriptase glycerol	REACH #: Annex V EC: 200-289-5 CAS: 56-81-5	≥50 - ≤75	Not classified.	-	[1]
RNase Block glycerol	REACH #: Annex V EC: 200-289-5 CAS: 56-81-5	≥50 - ≤75	Not classified. See Section 16 for the full text of the H statements declared above.	-	[1]

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
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.

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
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.

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.

Skin contact

: 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
10X AffinityScript RT buffer

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

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

SECTION 4: First aid measures

		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.
Ingestion	: 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.
Protection of first-aiders	: 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.
	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

Potential acute health effects

SECTION 4: First aid measures

Eye contact	: 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.
Inhalation	: 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.
Skin contact	: 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.
Ingestion	: 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.

Over-exposure signs/symptoms

Eye contact	: 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 4: First aid measures

Inhalation	: 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.
Skin contact	: 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.
Ingestion	: 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.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	: 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.
Specific treatments	: RNase-Free Water AffinityScript Multiple Temperature Reverse Transcriptase 10X AffinityScript RT buffer RNase Block Oligo(dT) Primer Random Primers 100 mM dNTP Mix (25	No specific treatment. No specific treatment. No specific treatment. No specific treatment. No specific treatment. No specific treatment. No specific treatment.

AffinityScript Multiple Temperature cDNA Synthesis Kit

SECTION 4: First aid measures

mM each dNTP)

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	: 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.
Unsuitable extinguishing media	: 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.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture	: 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)	In a fire or if heated, a pressure increase will occur and the container may burst. In a fire or if heated, a pressure increase will occur and the container may burst. In a fire or if heated, a pressure increase will occur and the container may burst. In a fire or if heated, a pressure increase will occur and the container may burst. In a fire or if heated, a pressure increase will occur and the container may burst. In a fire or if heated, a pressure increase will occur and the container may burst. In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous combustion products	: RNase-Free Water AffinityScript Multiple Temperature Reverse Transcriptase 10X AffinityScript RT buffer RNase Block Oligo(dT) Primer Random Primers	No specific data. Decomposition products may include the following materials: carbon dioxide carbon monoxide Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides Decomposition products may include the following materials: carbon dioxide carbon monoxide No specific data. No specific data.

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SECTION 5: Firefighting measures

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

Special precautions for fire-fighters

: 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
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.

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. 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 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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

10X AffinityScript RT buffer

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

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. 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.

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. Clothing for fire-fighters (including helmets, protective boots and gloves)

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SECTION 5: Firefighting measures

100 mM dNTP Mix (25 mM each dNTP)

conforming to European standard EN 469 will provide a basic level of protection for chemical incidents. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

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.

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,

SECTION 6: Accidental release measures

Random Primers	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

Methods for cleaning up : 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.

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SECTION 6: Accidental release measures

Random Primers	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

Protective measures	: 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).
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.

SECTION 7: Handling and storage

Random Primers	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. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.
100 mM dNTP Mix (25 mM each dNTP)	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. 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 before handling or use.
	10X AffinityScript RT buffer	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. 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

SECTION 7: Handling and storage

Random Primers

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.

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.
100 mM dNTP Mix (25 mM each dNTP)	Industrial applications, Professional applications.

Industrial sector specific solutions

: 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

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Exposure limit values
AffinityScript Multiple Temperature Reverse Transcriptase Glycerol	NAOSH (Ireland, 5/2021). Notes: Advisory Occupational Exposure Limit Values (OELVs) OELV: 10 mg/m ³ 8 hours. Form: mist
RNase Block Glycerol	NAOSH (Ireland, 5/2021). Notes: Advisory Occupational Exposure Limit Values (OELVs) OELV: 10 mg/m ³ 8 hours. Form: mist

Biological exposure indices

No exposure indices known.

Recommended monitoring procedures : 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.

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.

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SECTION 8: Exposure controls/personal protection

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

Physical state	: 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)	Liquid. Liquid. Liquid. Liquid. Liquid. Liquid. Liquid.
Colour	: 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)	Colourless. Not available. Not available. Not available. Not available. Not available. Not available.
Odour	: 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)	Odourless. Not available. Not available. Not available. Not available. Not available. Not available.
Odour threshold	: 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 available. Not available. Not available. Not available. Not available. Not available. Not available.
Melting point/freezing point	: RNase-Free Water AffinityScript Multiple Temperature Reverse Transcriptase 10X AffinityScript RT buffer RNase Block Oligo(dT) Primer	0°C Not available. Not available. Not available. 0°C

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SECTION 9: Physical and chemical properties

Initial boiling point and boiling range : Random Primers 0°C
 100 mM dNTP Mix (25 mM each dNTP) Not available.
 : 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
AffinityScript Multiple Temperature Reverse Transcriptase				
glycerol	-	-	177	-
RNase Block				
glycerol	-	-	177	-

Auto-ignition temperature :

Ingredient name	°C	Method
AffinityScript Multiple Temperature Reverse Transcriptase		
glycerol	370	-
RNase Block		
glycerol	370	-

AffinityScript Multiple Temperature cDNA Synthesis Kit

SECTION 9: Physical and chemical properties

Decomposition temperature : RNase-Free Water Not available.
 AffinityScript Multiple Not available.
 Temperature Reverse Transcriptase
 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 8
 Temperature Reverse Transcriptase
 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 Not available.
 Temperature Reverse Transcriptase
 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
	RNase-Free Water water	Soluble
	AffinityScript Multiple Temperature Reverse Transcriptase water	Soluble
	10X AffinityScript RT buffer water	Soluble
	RNase Block water	Soluble
	Oligo(dT) Primer water	Soluble
	Random Primers water	Soluble
	100 mM dNTP Mix (25 mM each dNTP) water	Soluble

Partition coefficient: n-octanol/water : RNase-Free Water -1.38
 AffinityScript Multiple Not applicable.
 Temperature Reverse Transcriptase
 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]

SECTION 9: Physical and chemical properties

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

Evaporation rate : RNase-Free Water Not available.
 AffinityScript Multiple Not available.
 Temperature Reverse Transcriptase
 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.

Relative density : RNase-Free Water 1
 AffinityScript Multiple Not available.
 Temperature Reverse Transcriptase
 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.

AffinityScript Multiple Temperature cDNA Synthesis Kit**SECTION 9: Physical and chemical properties**

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

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity	:	RNase-Free Water	No specific test data related to reactivity available for this product or its ingredients.
		AffinityScript Multiple	No specific test data related to reactivity available for this product or its ingredients.
		Temperature Reverse	
		Transcriptase	
		10X AffinityScript RT	No specific test data related to reactivity available for this product or its ingredients.
		buffer	
		RNase Block	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.
	Random Primers	No specific test data related to reactivity available for this	

SECTION 10: Stability and reactivity

100 mM dNTP Mix (25 mM each dNTP) product or its ingredients.
No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

: RNase-Free Water The product is stable.
AffinityScript Multiple The product is stable.
Temperature Reverse
Transcriptase
10X AffinityScript RT The product is stable.
buffer
RNase Block The product is stable.
Oligo(dT) Primer The product is stable.
Random Primers The product is stable.
100 mM dNTP Mix (25 mM each dNTP) The product is stable.

10.3 Possibility of hazardous reactions

: RNase-Free Water Under normal conditions of storage and use, hazardous reactions will not occur.
AffinityScript Multiple Under normal conditions of storage and use, hazardous reactions will not occur.
Temperature Reverse
Transcriptase
10X AffinityScript RT Under normal conditions of storage and use, hazardous reactions will not occur.
buffer
RNase Block 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.
Random Primers Under normal conditions of storage and use, hazardous reactions will not occur.
100 mM dNTP Mix (25 mM each dNTP) Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

: RNase-Free Water No specific data.
AffinityScript Multiple No specific data.
Temperature Reverse
Transcriptase
10X AffinityScript RT No specific data.
buffer
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.

10.5 Incompatible materials

: RNase-Free Water May react or be incompatible with oxidising materials.
AffinityScript Multiple May react or be incompatible with oxidising materials.
Temperature Reverse
Transcriptase
10X AffinityScript RT May react or be incompatible with oxidising materials.
buffer
RNase Block May react or be incompatible with oxidising materials.
Oligo(dT) Primer May react or be incompatible with oxidising materials.
Random Primers May react or be incompatible with oxidising materials.
100 mM dNTP Mix (25 mM each dNTP) May react or be incompatible with oxidising materials.

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SECTION 10: Stability and reactivity

10.6 Hazardous decomposition products	: RNase-Free Water	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	AffinityScript Multiple Temperature Reverse Transcriptase	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	10X AffinityScript RT buffer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	RNase Block	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.
	100 mM dNTP Mix (25 mM each dNTP)	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

N/A

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)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure

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

Potential acute health effects

SECTION 11: Toxicological information

Inhalation	: 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.
Ingestion	: 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.
Skin contact	: 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.
Eye contact	: 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

Inhalation	: 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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AffinityScript Multiple Temperature cDNA Synthesis Kit**SECTION 11: Toxicological information**

Ingestion	:	RNase-Free Water	No specific data.
		AffinityScript Multiple	No specific data.
		Temperature Reverse	
		Transcriptase	
		10X AffinityScript RT	No specific data.
		buffer	
		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.
Skin contact	:	RNase-Free Water	No specific data.
		AffinityScript Multiple	No specific data.
		Temperature Reverse	
		Transcriptase	
		10X AffinityScript RT	No specific data.
		buffer	
		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.
Eye contact	:	RNase-Free Water	No specific data.
		AffinityScript Multiple	No specific data.
		Temperature Reverse	
		Transcriptase	
		10X AffinityScript RT	No specific data.
		buffer	
		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**

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Conclusion/Summary : Not available.

General	:	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	No known significant effects or critical hazards.
		buffer	
		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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SECTION 11: Toxicological information

Carcinogenicity	: 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.
Mutagenicity	: 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.
Reproductive toxicity	: 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.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

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 _{ow}	BCF	Potential
RNase-Free Water water	-1.38	-	Low

12.4 Mobility in soil

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SECTION 12: Ecological information

Soil/water partition coefficient (K_{oc}) : Not available.
Mobility : Not available.

12.5 Results of PBT and vPvB assessment

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

12.6 Endocrine disrupting properties

Not available.

12.7 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

	ADR/RID	IMDG	IATA
14.1 UN number or ID 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

AffinityScript Multiple Temperature cDNA Synthesis Kit

SECTION 14: Transport 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
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.

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

No listed substance

Label	:	RNase-Free Water	Not applicable.
		AffinityScript Multiple	Not applicable.
		Temperature Reverse	
		Transcriptase	
		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.
		each dNTP)	

Other EU regulations

Ozone depleting substances (1005/2009/EU)

Not listed.

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

Not listed.

Persistent Organic Pollutants

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

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.


SECTION 15: Regulatory information

Inventory list

Australia	: Not determined.
Canada	: Not determined.
China	: All components are listed or exempted.
Eurasian Economic Union	: Russian Federation inventory : Not determined.
Japan	: Japan inventory (CSCL) : Not determined. Japan inventory (ISHL) : Not determined.
New Zealand	: All components are listed or exempted.
Philippines	: Not determined.
Republic of Korea	: Not determined.
Taiwan	: All components are listed or exempted.
Thailand	: Not determined.
Turkey	: Not determined.
United States	: All components are active or exempted.
Viet Nam	: 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]
- 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 according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Not classified.	

Full text of abbreviated H statements

Not applicable.

Full text of classifications [CLP/GHS]

Not applicable.

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Date of previous issue : No previous validation

Version : 1

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