

# SAFETY DATA SHEET



Custom MassCode cDNA Synthesis Kit, Part Number 930604

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

### 1.1 Product identifier

**Product name** : Custom MassCode cDNA Synthesis Kit, Part Number 930604  
**Part No. (Kit)** : 930604  
**Part No.** : RNase-free Water 600164-58  
MassCode Reverse 5190-3555  
Transcriptase  
10X MassCode RT 5190-3557  
Buffer  
100 mM dNTP Mix 5190-3558  
RNase Block 5190-3556  
Random Primers 5190-3559

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

Identified uses	
Analytical reagent.	
RNase-free Water	2 x 1.2 ml
MassCode Reverse Transcriptase	0.21 ml (192 reactions)
10X MassCode RT Buffer	0.42 ml
100 mM dNTP Mix	0.168 ml
RNase Block	0.105 ml (192 reactions)
Random Primers	0.66 ml (0.1 µg/µl)

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

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

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

### 1.4 Emergency telephone number

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

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : RNase-free Water Mono-constituent substance  
MassCode Reverse Mixture  
Transcriptase  
10X MassCode RT Mixture  
Buffer  
100 mM dNTP Mix Mixture  
RNase Block Mixture  
Random Primers Mixture

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

Not classified.

**Date of issue/Date of revision** : 15/07/2016

1/24

**SECTION 2: Hazards identification**

<b>Ingredients of unknown toxicity</b>	: RNase-free Water	Not applicable.
	MassCode Reverse Transcriptase	Not applicable.
	10X MassCode RT Buffer	Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 7.9%
	100 mM dNTP Mix	Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 5.7%
	RNase Block Random Primers	Not applicable. Not applicable.
<b>Ingredients of unknown ecotoxicity</b>	: RNase-free Water	Not applicable.
	MassCode Reverse Transcriptase	Not applicable.
	10X MassCode RT Buffer	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 7.9%
	100 mM dNTP Mix	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 5.7%
	RNase Block Random Primers	Not applicable. Not applicable.

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

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

**2.2 Label elements**

<b>Signal word</b>	: RNase-free Water	No signal word.
	MassCode Reverse Transcriptase	No signal word.
	10X MassCode RT Buffer	No signal word.
	100 mM dNTP Mix	No signal word.
	RNase Block Random Primers	No signal word. No signal word.
<b>Hazard statements</b>	: RNase-free Water	No known significant effects or critical hazards.
	MassCode Reverse Transcriptase	No known significant effects or critical hazards.
	10X MassCode RT Buffer	No known significant effects or critical hazards.
	100 mM dNTP Mix	No known significant effects or critical hazards.
	RNase Block Random Primers	No known significant effects or critical hazards. No known significant effects or critical hazards.

**Precautionary statements**

<b>Prevention</b>	: RNase-free Water	Not applicable.
	MassCode Reverse Transcriptase	Not applicable.
	10X MassCode RT Buffer	Not applicable.
	100 mM dNTP Mix	Not applicable.
	RNase Block Random Primers	Not applicable. Not applicable.
<b>Response</b>	: RNase-free Water	Not applicable.
	MassCode Reverse Transcriptase	Not applicable.
	10X MassCode RT Buffer	Not applicable.
	100 mM dNTP Mix	Not applicable.
	RNase Block Random Primers	Not applicable. Not applicable.

## SECTION 2: Hazards identification

<b>Storage</b>	: RNase-free Water MassCode Reverse Transcriptase 10X MassCode RT Buffer 100 mM dNTP Mix RNase Block Random Primers	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.
<b>Disposal</b>	: RNase-free Water MassCode Reverse Transcriptase 10X MassCode RT Buffer 100 mM dNTP Mix RNase Block Random Primers	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.
<b>Hazardous ingredients</b>	: No hazardous ingredient	
<b>Supplemental label elements</b>	: RNase-free Water MassCode Reverse Transcriptase 10X MassCode RT Buffer 100 mM dNTP Mix RNase Block Random Primers	Not applicable. 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>	: RNase-free Water MassCode Reverse Transcriptase 10X MassCode RT Buffer 100 mM dNTP Mix RNase Block Random Primers	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.
<b><u>Special packaging requirements</u></b>		
<b>Tactile warning of danger</b>	: RNase-free Water MassCode Reverse Transcriptase 10X MassCode RT Buffer 100 mM dNTP Mix RNase Block Random Primers	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.
<b>2.3 Other hazards</b>		
<b>Other hazards which do not result in classification</b>	: MassCode Reverse Transcriptase 10X MassCode RT Buffer 100 mM dNTP Mix RNase Block Ribonuclease Inhibitor Random Primers RNase-free Water	Not available. Not available. Not available. Not available. Not available. Not available. Not available.

## SECTION 3: Composition/information on ingredients

<b>3.2 Mixtures</b>	: RNase-free Water	Mono-constituent substance
	MassCode Reverse Transcriptase	Mixture
	10X MassCode RT Buffer	Mixture
	100 mM dNTP Mix	Mixture
	RNase Block	Mixture
	Random Primers	Mixture

Product/ingredient name	Identifiers	%	Classification	Type
<b>RNase-free Water</b> Water	7732-18-5	100	Not classified.	[A]
<b>MassCode Reverse Transcriptase</b> Glycerol	EC: 200-289-5 CAS: 56-81-5	≥50 - ≤75	Not classified.	[2]
<b>10X MassCode RT Buffer</b> 2-Amino-2-(hydroxymethyl) propane-1,3-diol hydrochloride	EC: 214-684-5 CAS: 1185-53-1	<10	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335	[1]
<b>RNase Block</b> Glycerol	EC: 200-289-5 CAS: 56-81-5	≥50 - ≤75	Not classified.  <b>See Section 16 for the full text of the H statements declared above.</b>	[2]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

### Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[5] Substance of equivalent concern

[A] Constituent

[B] Impurity

[C] Stabilising additive

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

<b>Eye contact</b>	: 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.
	MassCode 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 MassCode 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.
	100 mM dNTP Mix	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	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.
	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.

**SECTION 4: First aid measures**

<b>Inhalation</b>	:	RNase-free Water	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
		MassCode Reverse Transcriptase	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
		10X MassCode 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.
		100 mM dNTP Mix	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
		RNase Block	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.
<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.
		MassCode Reverse Transcriptase	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
		10X MassCode RT Buffer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
		100 mM dNTP Mix	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.
		Random Primers	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. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
		MassCode Reverse Transcriptase	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
		10X MassCode RT Buffer	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
		100 mM dNTP Mix	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not

**SECTION 4: First aid measures**

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

**Protection of first-aiders**

: RNase-free Water	No action shall be taken involving any personal risk or without suitable training.
MassCode Reverse Transcriptase	No action shall be taken involving any personal risk or without suitable training.
10X MassCode RT Buffer	No action shall be taken involving any personal risk or without suitable training.
100 mM dNTP Mix	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.
Random Primers	No action shall be taken involving any personal risk or without suitable training.

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

Potential acute health effects

<b>Eye contact</b>	: RNase-free Water MassCode Reverse Transcriptase 10X MassCode RT Buffer 100 mM dNTP Mix RNase Block Random Primers	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Inhalation</b>	: RNase-free Water MassCode Reverse Transcriptase 10X MassCode RT Buffer 100 mM dNTP Mix RNase Block Random Primers	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>	: RNase-free Water MassCode Reverse Transcriptase 10X MassCode RT Buffer 100 mM dNTP Mix RNase Block Random Primers	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Ingestion</b>	: RNase-free Water MassCode Reverse Transcriptase 10X MassCode RT Buffer 100 mM dNTP Mix RNase Block Random Primers	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

Over-exposure signs/symptoms

**SECTION 4: First aid measures**

<b>Eye contact</b>	:	RNase-free Water	No specific data.
		MassCode Reverse Transcriptase	No specific data.
		10X MassCode RT Buffer	No specific data.
		100 mM dNTP Mix	No specific data.
		RNase Block	No specific data.
		Random Primers	No specific data.
<b>Inhalation</b>	:	RNase-free Water	No specific data.
		MassCode Reverse Transcriptase	No specific data.
		10X MassCode RT Buffer	No specific data.
		100 mM dNTP Mix	No specific data.
		RNase Block	No specific data.
		Random Primers	No specific data.
<b>Skin contact</b>	:	RNase-free Water	No specific data.
		MassCode Reverse Transcriptase	No specific data.
		10X MassCode RT Buffer	No specific data.
		100 mM dNTP Mix	No specific data.
		RNase Block	No specific data.
		Random Primers	No specific data.
<b>Ingestion</b>	:	RNase-free Water	No specific data.
		MassCode Reverse Transcriptase	No specific data.
		10X MassCode RT Buffer	No specific data.
		100 mM dNTP Mix	No specific data.
		RNase Block	No specific data.
		Random Primers	No specific data.

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

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

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

<b>Suitable extinguishing media</b>	: RNase-free Water	Use an extinguishing agent suitable for the surrounding fire.
	MassCode Reverse Transcriptase	Use an extinguishing agent suitable for the surrounding fire.
	10X MassCode RT Buffer	Use an extinguishing agent suitable for the surrounding fire.
	100 mM dNTP Mix	Use an extinguishing agent suitable for the surrounding fire.
	RNase Block	Use an extinguishing agent suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	: Random Primers	Use an extinguishing agent suitable for the surrounding fire.
	: RNase-free Water	None known.
	MassCode Reverse Transcriptase	None known.
	10X MassCode RT Buffer	None known.
	100 mM dNTP Mix	None known.
	RNase Block	None known.
	Random Primers	None known.

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

<b>Hazards from the substance or mixture</b>	: RNase-free Water	In a fire or if heated, a pressure increase will occur and the container may burst.
	MassCode Reverse Transcriptase	In a fire or if heated, a pressure increase will occur and the container may burst.
	10X MassCode RT Buffer	In a fire or if heated, a pressure increase will occur and the container may burst.
	100 mM dNTP Mix	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.
<b>Hazardous combustion products</b>	: Random Primers	In a fire or if heated, a pressure increase will occur and the container may burst.
	: RNase-free Water	No specific data.
	MassCode Reverse Transcriptase	Decomposition products may include the following materials:  carbon dioxide carbon monoxide
	10X MassCode RT Buffer	Decomposition products may include the following materials:  carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides
	100 mM dNTP Mix	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides phosphorus oxides
	RNase Block	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	Random Primers	No specific data.

### 5.3 Advice for firefighters

<b>Special precautions for fire-fighters</b>	: RNase-free Water	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
	MassCode 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 MassCode RT	Promptly isolate the scene by removing all persons from the



## SECTION 5: Firefighting measures

	Buffer	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	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.
	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.
<b>Special protective equipment for fire-fighters</b>	: RNase-free Water	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
	MassCode 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 MassCode 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.
	100 mM dNTP Mix	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
	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.
	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) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## SECTION 6: Accidental release measures

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

<b>For non-emergency personnel</b>	: RNase-free Water	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
	MassCode 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 MassCode 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.

**SECTION 6: Accidental release measures**

**For emergency responders**

100 mM dNTP Mix	Do not touch or walk through spilt material. Put on appropriate personal protective equipment. 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.
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.
: 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".
MassCode 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 MassCode 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".
100 mM dNTP Mix	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
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".
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".

**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).
MassCode 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 MassCode 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).
100 mM dNTP Mix	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
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).
Random Primers	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant

## SECTION 6: Accidental release measures

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.

MassCode 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 MassCode 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.

100 mM dNTP Mix

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

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.

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.

### 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).

MassCode Reverse Transcriptase

Put on appropriate personal protective equipment (see Section 8).

10X MassCode RT Buffer

Put on appropriate personal protective equipment (see Section 8).

100 mM dNTP Mix

Put on appropriate personal protective equipment (see Section 8).

RNase Block

Put on appropriate personal protective equipment (see Section 8).

Random Primers

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.

MassCode 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,

**SECTION 7: Handling and storage**

10X MassCode RT Buffer	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.
100 mM dNTP Mix	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
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.
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.

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

: 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.
MassCode 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.
10X MassCode 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.
100 mM dNTP Mix	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

## SECTION 7: Handling and storage

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.
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.

### 7.3 Specific end use(s)

<b>Recommendations</b>	: RNase-free Water	Industrial applications, Professional applications.
	MassCode Reverse Transcriptase	Industrial applications, Professional applications.
<b>Industrial sector specific solutions</b>	: 10X MassCode RT Buffer	Industrial applications, Professional applications.
	100 mM dNTP Mix	Industrial applications, Professional applications.
	RNase Block	Industrial applications, Professional applications.
	Random Primers	Industrial applications, Professional applications.
	: RNase-free Water	Not applicable.
	MassCode Reverse Transcriptase	Not applicable.
	: 10X MassCode RT Buffer	Not applicable.
	100 mM dNTP Mix	Not applicable.
	RNase Block	Not applicable.
	Random Primers	Not applicable.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

Product/ingredient name	Exposure limit values
<b>MassCode Reverse Transcriptase</b> Glycerol	<b>EH40/2005 WELs (United Kingdom (UK), 12/2011).</b> TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Mist
<b>RNase Block</b> Glycerol	<b>EH40/2005 WELs (United Kingdom (UK), 12/2011).</b> TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Mist

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

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

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

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****Appearance**

<b>Physical state</b>	: RNase-free Water	Liquid.	
	MassCode Reverse Transcriptase	Liquid.	
	10X MassCode RT Buffer	Liquid.	
	100 mM dNTP Mix	Liquid.	
	RNase Block	Liquid.	
	Random Primers	Liquid.	
	<b>Colour</b>	: RNase-free Water	Colourless.
		MassCode Reverse Transcriptase	Not available.
		10X MassCode RT Buffer	Not available.
100 mM dNTP Mix		Not available.	
RNase Block		Not available.	
Random Primers		Not available.	

**SECTION 9: Physical and chemical properties**

<b>Odour</b>	: RNase-free Water	Odourless.
	MassCode Reverse Transcriptase	Not available.
	10X MassCode RT Buffer	Not available.
	100 mM dNTP Mix	Not available.
	RNase Block	Not available.
<b>Odour threshold</b>	: RNase-free Water	Not available.
	MassCode Reverse Transcriptase	Not available.
	10X MassCode RT Buffer	Not available.
	100 mM dNTP Mix	Not available.
	RNase Block	Not available.
<b>pH</b>	: RNase-free Water	Not available.
	MassCode Reverse Transcriptase	8
	10X MassCode RT Buffer	8.3
	100 mM dNTP Mix	7.5
	RNase Block	7.6
<b>Melting point/freezing point</b>	: RNase-free Water	0°C
	MassCode Reverse Transcriptase	Not available.
	10X MassCode RT Buffer	Not available.
	100 mM dNTP Mix	Not available.
	RNase Block	Not available.
<b>Initial boiling point and boiling range</b>	: RNase-free Water	100°C
	MassCode Reverse Transcriptase	Not available.
	10X MassCode RT Buffer	Not available.
	100 mM dNTP Mix	Not available.
	RNase Block	Not available.
<b>Flash point</b>	: RNase-free Water	100°C
	MassCode Reverse Transcriptase	Not available.
	10X MassCode RT Buffer	Not available.
	100 mM dNTP Mix	Not available.
	RNase Block	Not available.
<b>Evaporation rate</b>	: RNase-free Water	Not available.
	MassCode Reverse Transcriptase	Not available.
	10X MassCode RT Buffer	Not available.
	100 mM dNTP Mix	Not available.
	RNase Block	Not available.

**SECTION 9: Physical and chemical properties**

<b>Flammability (solid, gas)</b>	: RNase-free Water MassCode Reverse Transcriptase 10X MassCode RT Buffer 100 mM dNTP Mix RNase Block Random Primers	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.
<b>Upper/lower flammability or explosive limits</b>	: RNase-free Water MassCode Reverse Transcriptase 10X MassCode RT Buffer 100 mM dNTP Mix RNase Block Random Primers	Not available. Not available. Not available. Not available. Not available. Not available.
<b>Vapour pressure</b>	: RNase-free Water MassCode Reverse Transcriptase 10X MassCode RT Buffer 100 mM dNTP Mix RNase Block Random Primers	Not available. Not available. Not available. Not available. Not available. Not available.
<b>Vapour density</b>	: RNase-free Water MassCode Reverse Transcriptase 10X MassCode RT Buffer 100 mM dNTP Mix RNase Block Random Primers	Not available. Not available. Not available. Not available. Not available. Not available.
<b>Relative density</b>	: RNase-free Water MassCode Reverse Transcriptase 10X MassCode RT Buffer 100 mM dNTP Mix RNase Block Random Primers	Not available. Not available. Not available. Not available. Not available. Not available.
<b>Solubility(ies)</b>	: RNase-free Water  MassCode Reverse Transcriptase 10X MassCode RT Buffer 100 mM dNTP Mix  RNase Block  Random Primers	Easily soluble in the following materials: cold water and hot water.  Soluble in the following materials: cold water and hot water. Easily soluble in the following materials: cold water and hot water. Easily soluble in the following materials: cold water and hot water.  Soluble in the following materials: cold water and hot water.  Easily soluble in the following materials: cold water and hot water.
<b>Partition coefficient: n-octanol/water</b>	: RNase-free Water MassCode Reverse Transcriptase 10X MassCode RT Buffer 100 mM dNTP Mix RNase Block Random Primers	Not available. Not available. Not available. Not available. Not available. Not available.



**SECTION 9: Physical and chemical properties**

<b>Auto-ignition temperature</b>	: RNase-free Water	Not available.
	MassCode Reverse Transcriptase	Not available.
	10X MassCode RT Buffer	Not available.
	100 mM dNTP Mix	Not available.
	RNase Block	Not available.
	Random Primers	Not available.
<b>Decomposition temperature</b>	: RNase-free Water	Not available.
	MassCode Reverse Transcriptase	Not available.
	10X MassCode RT Buffer	Not available.
	100 mM dNTP Mix	Not available.
	RNase Block	Not available.
	Random Primers	Not available.
<b>Viscosity</b>	: RNase-free Water	Not available.
	MassCode Reverse Transcriptase	Not available.
	10X MassCode RT Buffer	Not available.
	100 mM dNTP Mix	Not available.
	RNase Block	Not available.
	Random Primers	Not available.
<b>Explosive properties</b>	: RNase-free Water	Not available.
	MassCode Reverse Transcriptase	Not available.
	10X MassCode RT Buffer	Not available.
	100 mM dNTP Mix	Not available.
	RNase Block	Not available.
	Random Primers	Not available.
<b>Oxidising properties</b>	: RNase-free Water	Not available.
	MassCode Reverse Transcriptase	Not available.
	10X MassCode RT Buffer	Not available.
	100 mM dNTP Mix	Not available.
	RNase Block	Not available.
	Random Primers	Not available.

**9.2 Other information**

No additional information.

**SECTION 10: Stability and reactivity**

<b>10.1 Reactivity</b>	: RNase-free Water	No specific test data related to reactivity available for this product or its ingredients.
	MassCode Reverse Transcriptase	No specific test data related to reactivity available for this product or its ingredients.
	10X MassCode RT Buffer	No specific test data related to reactivity available for this product or its ingredients.
	100 mM dNTP Mix	No specific test data related to reactivity available for this product or its ingredients.
	RNase Block	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 product or its ingredients.

## SECTION 10: Stability and reactivity

<b>10.2 Chemical stability</b>	: RNase-free Water MassCode Reverse Transcriptase 10X MassCode RT Buffer 100 mM dNTP Mix RNase Block Random Primers	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>	: RNase-free Water  MassCode Reverse Transcriptase 10X MassCode RT Buffer 100 mM dNTP Mix  RNase Block  Random Primers	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>	: RNase-free Water MassCode Reverse Transcriptase 10X MassCode RT Buffer 100 mM dNTP Mix RNase Block Random Primers	No specific data. No specific data. No specific data. No specific data. No specific data. No specific data.
<b>10.5 Incompatible materials</b>	: RNase-free Water MassCode Reverse Transcriptase 10X MassCode RT Buffer 100 mM dNTP Mix RNase Block Random Primers	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>	: MassCode Reverse Transcriptase 10X MassCode RT Buffer 100 mM dNTP Mix  RNase Block Ribonuclease Inhibitor Random Primers  RNase-free Water	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

Not available.

#### Acute toxicity estimates

Not available.

#### Irritation/Corrosion

## SECTION 11: Toxicological information

**Conclusion/Summary** : Not available.

### Sensitiser

**Conclusion/Summary** : Not available.

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

Not available.

### Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
<b>10X MassCode RT Buffer</b> 2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	Category 3	Not applicable.	Respiratory tract irritation

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

<b>Information on likely routes of exposure</b>	: RNase-free Water MassCode Reverse Transcriptase	Not available. Routes of entry anticipated: Oral, Dermal, Inhalation.
	: 10X MassCode RT Buffer	Routes of entry anticipated: Oral, Dermal, Inhalation.
	: 100 mM dNTP Mix RNase Block	Not available. Routes of entry anticipated: Oral, Dermal, Inhalation.
	: Random Primers	Not available.

### Potential acute health effects

<b>Inhalation</b>	: RNase-free Water MassCode Reverse Transcriptase	No known significant effects or critical hazards. No known significant effects or critical hazards.
	: 10X MassCode RT Buffer	No known significant effects or critical hazards.
	: 100 mM dNTP Mix RNase Block Random Primers	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Ingestion</b>	: RNase-free Water MassCode Reverse Transcriptase	No known significant effects or critical hazards. No known significant effects or critical hazards.
	: 10X MassCode RT Buffer	No known significant effects or critical hazards.
	: 100 mM dNTP Mix RNase Block Random Primers	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Skin contact</b>	: RNase-free Water MassCode Reverse Transcriptase	No known significant effects or critical hazards. No known significant effects or critical hazards.
	: 10X MassCode RT Buffer	No known significant effects or critical hazards.
	: 100 mM dNTP Mix RNase Block Random Primers	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>	: RNase-free Water MassCode Reverse Transcriptase	No known significant effects or critical hazards. No known significant effects or critical hazards.
	: 10X MassCode RT Buffer	No known significant effects or critical hazards.
	: 100 mM dNTP Mix RNase Block Random Primers	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

**SECTION 11: Toxicological information**

<b>Inhalation</b>	:	RNase-free Water	No specific data.
		MassCode Reverse Transcriptase	No specific data.
		10X MassCode RT Buffer	No specific data.
		100 mM dNTP Mix	No specific data.
		RNase Block	No specific data.
		Random Primers	No specific data.
<b>Ingestion</b>	:	RNase-free Water	No specific data.
		MassCode Reverse Transcriptase	No specific data.
		10X MassCode RT Buffer	No specific data.
		100 mM dNTP Mix	No specific data.
		RNase Block	No specific data.
		Random Primers	No specific data.
<b>Skin contact</b>	:	RNase-free Water	No specific data.
		MassCode Reverse Transcriptase	No specific data.
		10X MassCode RT Buffer	No specific data.
		100 mM dNTP Mix	No specific data.
		RNase Block	No specific data.
		Random Primers	No specific data.
<b>Eye contact</b>	:	RNase-free Water	No specific data.
		MassCode Reverse Transcriptase	No specific data.
		10X MassCode RT Buffer	No specific data.
		100 mM dNTP Mix	No specific data.
		RNase Block	No specific data.
		Random Primers	No specific data.

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

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

**Long term exposure**

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

**Potential chronic health effects**

<b>General</b>	:	RNase-free Water	No known significant effects or critical hazards.
		MassCode Reverse Transcriptase	No known significant effects or critical hazards.
		10X MassCode RT Buffer	No known significant effects or critical hazards.
		100 mM dNTP Mix	No known significant effects or critical hazards.
		RNase Block	No known significant effects or critical hazards.
		Random Primers	No known significant effects or critical hazards.
<b>Carcinogenicity</b>	:	RNase-free Water	No known significant effects or critical hazards.
		MassCode Reverse Transcriptase	No known significant effects or critical hazards.
		10X MassCode RT Buffer	No known significant effects or critical hazards.
		100 mM dNTP Mix	No known significant effects or critical hazards.
		RNase Block	No known significant effects or critical hazards.
		Random Primers	No known significant effects or critical hazards.

**SECTION 11: Toxicological information**

<b>Mutagenicity</b>	: RNase-free Water	No known significant effects or critical hazards.
	MassCode Reverse Transcriptase	No known significant effects or critical hazards.
	10X MassCode RT Buffer	No known significant effects or critical hazards.
	100 mM dNTP Mix	No known significant effects or critical hazards.
	RNase Block	No known significant effects or critical hazards.
<b>Teratogenicity</b>	: RNase-free Water	No known significant effects or critical hazards.
	MassCode Reverse Transcriptase	No known significant effects or critical hazards.
	10X MassCode RT Buffer	No known significant effects or critical hazards.
	100 mM dNTP Mix	No known significant effects or critical hazards.
	RNase Block	No known significant effects or critical hazards.
<b>Developmental effects</b>	: RNase-free Water	No known significant effects or critical hazards.
	MassCode Reverse Transcriptase	No known significant effects or critical hazards.
	10X MassCode RT Buffer	No known significant effects or critical hazards.
	100 mM dNTP Mix	No known significant effects or critical hazards.
	RNase Block	No known significant effects or critical hazards.
<b>Fertility effects</b>	: RNase-free Water	No known significant effects or critical hazards.
	MassCode Reverse Transcriptase	No known significant effects or critical hazards.
	10X MassCode RT Buffer	No known significant effects or critical hazards.
	100 mM dNTP Mix	No known significant effects or critical hazards.
	RNase Block	No known significant effects or critical hazards.
	: Random Primers	No known significant effects or critical hazards.

**SECTION 12: Ecological information****12.1 Toxicity**

**Conclusion/Summary** : Not available.

**12.2 Persistence and degradability**

Not available.

**12.3 Bioaccumulative potential**

Not available.

**12.4 Mobility in soil**

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

**Mobility** : Not available.

**12.5 Results of PBT and vPvB assessment**

**PBT** : Not applicable.

**vPvB** : Not applicable.

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

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

**Hazardous waste** : 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

### Regulatory information

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

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

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

## SECTION 15: Regulatory information

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

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

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

##### Annex XIV

None of the components are listed.

##### Substances of very high concern

None of the components are listed.

<b>Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</b>	<b>Annex XVII - Restrictions</b>	RNase-free Water	Not applicable.
		MassCode Reverse Transcriptase	Not applicable.
		10X MassCode RT Buffer	Not applicable.
		100 mM dNTP Mix	Not applicable.
		RNase Block	Not applicable.
		Random Primers	Not applicable.

#### Other EU regulations

**Europe inventory** : All components are listed or exempted.

##### Seveso Directive

This product is not controlled under the Seveso Directive.

#### National regulations

##### International regulations

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

Not listed.

## SECTION 15: Regulatory information

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

Not listed.

### Stockholm Convention on Persistent Organic Pollutants

Not listed.

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

Not listed.

### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### International lists

#### National inventory

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

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

## SECTION 16: Other information

✔ Indicates information that has changed from previously issued version.

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

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

Classification	Justification
Not classified.	

**Full text of abbreviated H statements** : **10X MassCode RT Buffer**  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.

**Full text of classifications [CLP/GHS]** : **10X MassCode RT Buffer**  
Eye Irrit. 2, H319 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2  
Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION - Category 2  
STOT SE 3, H335 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

**Date of issue/ Date of revision** : 15/07/2016

## SECTION 16: Other information

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

**Version** : 1

### Notice to reader

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