

# SAFETY DATA SHEET



SureMASTR MODY

## Section 1. Identification

**Product identifier** : SureMASTR MODY  
**Part no. (chemical kit)** : MR-0100.024  
**Part no.** : PCR Mix Plex 1 I-0631  
 PCR Mix Plex 2 I-0632  
 PCR Mix Plex 3 I-0633  
 PCR Mix Plex 4 I-0634  
 PCR Mix Plex 5 I-0635  
 Taq DNA Polymerase I-0892  
 AR 2 I-1885

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

**Material uses** : Analytical reagent.  
 For Research Use Only. Not for use in diagnostic procedures.

PCR Mix Plex 1	0.24 ml
PCR Mix Plex 2	0.24 ml
PCR Mix Plex 3	0.24 ml
PCR Mix Plex 4	0.24 ml
PCR Mix Plex 5	0.24 ml
Taq DNA Polymerase	0.014 ml
AR 2	1.5 ml

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

**Emergency telephone number (with hours of operation)** : CHEMTREC®: +(61)-290372994

## Section 2. Hazard(s) identification

### Classification of the substance or mixture

#### **Taq DNA Polymerase**

H412	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
PCR Mix Plex 1	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 1.1%
PCR Mix Plex 2	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 1.1%
PCR Mix Plex 3	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 1.1%
PCR Mix Plex 4	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 1.1%
PCR Mix Plex 5	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 5.6%

### GHS label elements

## Section 2. Hazard(s) identification

<b>Signal word</b>	: PCR Mix Plex 1 PCR Mix Plex 2 PCR Mix Plex 3 PCR Mix Plex 4 PCR Mix Plex 5 Taq DNA Polymerase AR 2	No signal word. No signal word. No signal word. No signal word. No signal word. No signal word. No signal word.
<b>Hazard statements</b>	: PCR Mix Plex 1 PCR Mix Plex 2 PCR Mix Plex 3 PCR Mix Plex 4 PCR Mix Plex 5 Taq DNA Polymerase AR 2	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. H412 - Harmful to aquatic life with long lasting effects. No known significant effects or critical hazards.
<b><u>Precautionary statements</u></b>		
<b>Prevention</b>	: PCR Mix Plex 1 PCR Mix Plex 2 PCR Mix Plex 3 PCR Mix Plex 4 PCR Mix Plex 5 Taq DNA Polymerase AR 2	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. P273 - Avoid release to the environment. Not applicable.
<b>Response</b>	: PCR Mix Plex 1 PCR Mix Plex 2 PCR Mix Plex 3 PCR Mix Plex 4 PCR Mix Plex 5 Taq DNA Polymerase AR 2	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.
<b>Storage</b>	: PCR Mix Plex 1 PCR Mix Plex 2 PCR Mix Plex 3 PCR Mix Plex 4 PCR Mix Plex 5 Taq DNA Polymerase AR 2	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.
<b>Disposal</b>	: PCR Mix Plex 1 PCR Mix Plex 2 PCR Mix Plex 3 PCR Mix Plex 4 PCR Mix Plex 5 Taq DNA Polymerase  AR 2	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations. Not applicable.
<b>Supplemental label elements</b>		
<b>Additional warning phrases</b>	: PCR Mix Plex 1 PCR Mix Plex 2 PCR Mix Plex 3 PCR Mix Plex 4 PCR Mix Plex 5 Taq DNA Polymerase AR 2	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.

## Section 2. Hazard(s) identification

<b>Other hazards which do not result in classification</b>	: PCR Mix Plex 1	None known.
	PCR Mix Plex 2	None known.
	PCR Mix Plex 3	None known.
	PCR Mix Plex 4	None known.
	PCR Mix Plex 5	None known.
	Taq DNA Polymerase	None known.
	AR 2	None known.

## Section 3. Composition and ingredient information

<b>Substance/mixture</b>	: PCR Mix Plex 1	Mixture
	PCR Mix Plex 2	Mixture
	PCR Mix Plex 3	Mixture
	PCR Mix Plex 4	Mixture
	PCR Mix Plex 5	Mixture
	Taq DNA Polymerase	Mixture
	AR 2	Mixture

### CAS number/other identifiers

Ingredient name	% (w/w)	CAS number
<b>Taq DNA Polymerase</b>		
Glycerol	≥30 - ≤60	56-81-5
Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	<1	9036-19-5

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.

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

## Section 4. First aid measures

### Description of necessary first aid measures

<b>Eye contact</b>	: PCR Mix Plex 1	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	PCR Mix Plex 2	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	PCR Mix Plex 3	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	PCR Mix Plex 4	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	PCR Mix Plex 5	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.
	Taq DNA Polymerase	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
	AR 2	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>	: PCR Mix Plex 1	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.
	PCR Mix Plex 2	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.
	PCR Mix Plex 3	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.
	PCR Mix Plex 4	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.
	PCR Mix Plex 5	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.
	Taq DNA Polymerase	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
<b>Skin contact</b>	AR 2	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.
	: PCR Mix Plex 1	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	PCR Mix Plex 2	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	PCR Mix Plex 3	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	PCR Mix Plex 4	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	PCR Mix Plex 5	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Taq DNA Polymerase	Flush contaminated skin with plenty of water.	

## Section 4. First aid measures

	AR 2	Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse. Flush contaminated skin with plenty of water.
<b>Ingestion</b>	: PCR Mix Plex 1	Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	PCR Mix Plex 2	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.
	PCR Mix Plex 3	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.
	PCR Mix Plex 4	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.
	PCR Mix Plex 5	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.
	Taq DNA Polymerase	Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
	AR 2	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.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

<b>Eye contact</b>	: PCR Mix Plex 1	No known significant effects or critical hazards.
	PCR Mix Plex 2	No known significant effects or critical hazards.
	PCR Mix Plex 3	No known significant effects or critical hazards.
	PCR Mix Plex 4	No known significant effects or critical hazards.
	PCR Mix Plex 5	No known significant effects or critical hazards.
	Taq DNA Polymerase	No known significant effects or critical hazards.
	AR 2	No known significant effects or critical hazards.

## Section 4. First aid measures

<b>Inhalation</b>	:	PCR Mix Plex 1	No known significant effects or critical hazards.
		PCR Mix Plex 2	No known significant effects or critical hazards.
		PCR Mix Plex 3	No known significant effects or critical hazards.
		PCR Mix Plex 4	No known significant effects or critical hazards.
		PCR Mix Plex 5	No known significant effects or critical hazards.
		Taq DNA Polymerase AR 2	No known significant effects or critical hazards.
<b>Skin contact</b>	:	PCR Mix Plex 1	No known significant effects or critical hazards.
		PCR Mix Plex 2	No known significant effects or critical hazards.
		PCR Mix Plex 3	No known significant effects or critical hazards.
		PCR Mix Plex 4	No known significant effects or critical hazards.
		PCR Mix Plex 5	No known significant effects or critical hazards.
		Taq DNA Polymerase AR 2	No known significant effects or critical hazards.
<b>Ingestion</b>	:	PCR Mix Plex 1	No known significant effects or critical hazards.
		PCR Mix Plex 2	No known significant effects or critical hazards.
		PCR Mix Plex 3	No known significant effects or critical hazards.
		PCR Mix Plex 4	No known significant effects or critical hazards.
		PCR Mix Plex 5	No known significant effects or critical hazards.
		Taq DNA Polymerase AR 2	No known significant effects or critical hazards.

### Over-exposure signs/symptoms

<b>Eye contact</b>	:	PCR Mix Plex 1	No specific data.
		PCR Mix Plex 2	No specific data.
		PCR Mix Plex 3	No specific data.
		PCR Mix Plex 4	No specific data.
		PCR Mix Plex 5	No specific data.
		Taq DNA Polymerase AR 2	No specific data.
<b>Inhalation</b>	:	PCR Mix Plex 1	No specific data.
		PCR Mix Plex 2	No specific data.
		PCR Mix Plex 3	No specific data.
		PCR Mix Plex 4	No specific data.
		PCR Mix Plex 5	No specific data.
		Taq DNA Polymerase AR 2	No specific data.
<b>Skin contact</b>	:	PCR Mix Plex 1	No specific data.
		PCR Mix Plex 2	No specific data.
		PCR Mix Plex 3	No specific data.
		PCR Mix Plex 4	No specific data.
		PCR Mix Plex 5	No specific data.
		Taq DNA Polymerase AR 2	No specific data.
<b>Ingestion</b>	:	PCR Mix Plex 1	No specific data.
		PCR Mix Plex 2	No specific data.
		PCR Mix Plex 3	No specific data.
		PCR Mix Plex 4	No specific data.
		PCR Mix Plex 5	No specific data.
		Taq DNA Polymerase AR 2	No specific data.

### Indication of immediate medical attention and special treatment needed, if necessary

<b>Notes to physician</b>	:	PCR Mix Plex 1	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.
		PCR Mix Plex 2	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.
		PCR Mix Plex 3	In case of inhalation of decomposition products in a

## Section 4. First aid measures

	PCR Mix Plex 4	fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
	PCR Mix Plex 5	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.
	Taq DNA Polymerase	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	AR 2	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
<b>Specific treatments</b>	: PCR Mix Plex 1	No specific treatment.
	PCR Mix Plex 2	No specific treatment.
	PCR Mix Plex 3	No specific treatment.
	PCR Mix Plex 4	No specific treatment.
	PCR Mix Plex 5	No specific treatment.
	Taq DNA Polymerase	No specific treatment.
	AR 2	No specific treatment.
<b>Protection of first-aiders</b>	: PCR Mix Plex 1	No action shall be taken involving any personal risk or without suitable training.
	PCR Mix Plex 2	No action shall be taken involving any personal risk or without suitable training.
	PCR Mix Plex 3	No action shall be taken involving any personal risk or without suitable training.
	PCR Mix Plex 4	No action shall be taken involving any personal risk or without suitable training.
	PCR Mix Plex 5	No action shall be taken involving any personal risk or without suitable training.
	Taq DNA Polymerase	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
	AR 2	No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

## Section 5. Firefighting measures

### Extinguishing media

<b>Suitable extinguishing media</b>	: PCR Mix Plex 1	Use an extinguishing agent suitable for the surrounding fire.
	PCR Mix Plex 2	Use an extinguishing agent suitable for the surrounding fire.
	PCR Mix Plex 3	Use an extinguishing agent suitable for the surrounding fire.
	PCR Mix Plex 4	Use an extinguishing agent suitable for the surrounding fire.
	PCR Mix Plex 5	Use an extinguishing agent suitable for the surrounding fire.
	Taq DNA Polymerase	Use an extinguishing agent suitable for the surrounding fire.
	AR 2	Use an extinguishing agent suitable for the surrounding fire.

## Section 5. Firefighting measures

<b>Unsuitable extinguishing media</b>	:	PCR Mix Plex 1	None known.
		PCR Mix Plex 2	None known.
		PCR Mix Plex 3	None known.
		PCR Mix Plex 4	None known.
		PCR Mix Plex 5	None known.
		Taq DNA Polymerase AR 2	None known. None known.
<b>Specific hazards arising from the chemical</b>	:	PCR Mix Plex 1	In a fire or if heated, a pressure increase will occur and the container may burst.
		PCR Mix Plex 2	In a fire or if heated, a pressure increase will occur and the container may burst.
		PCR Mix Plex 3	In a fire or if heated, a pressure increase will occur and the container may burst.
		PCR Mix Plex 4	In a fire or if heated, a pressure increase will occur and the container may burst.
		PCR Mix Plex 5	In a fire or if heated, a pressure increase will occur and the container may burst.
		Taq DNA Polymerase	In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
<b>Hazardous thermal decomposition products</b>	:	PCR Mix Plex 1	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides phosphorus oxides
		PCR Mix Plex 2	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides phosphorus oxides
		PCR Mix Plex 3	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides phosphorus oxides
		PCR Mix Plex 4	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides phosphorus oxides
		PCR Mix Plex 5	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides phosphorus oxides
		Taq DNA Polymerase	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	AR 2	Decomposition products may include the following materials:	

## Section 5. Firefighting measures

carbon dioxide  
carbon monoxide  
nitrogen oxides

<b>Special protective actions for fire-fighters</b>	: PCR Mix Plex 1	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
	PCR Mix Plex 2	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
	PCR Mix Plex 3	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
	PCR Mix Plex 4	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
	PCR Mix Plex 5	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.
	Taq DNA Polymerase	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
	AR 2	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>	: PCR Mix Plex 1	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	PCR Mix Plex 2	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	PCR Mix Plex 3	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	PCR Mix Plex 4	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	PCR Mix Plex 5	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Taq DNA Polymerase	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	AR 2	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

<b>For non-emergency personnel</b>	: PCR Mix Plex 1	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
	PCR Mix Plex 2	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
	PCR Mix Plex 3	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
	PCR Mix Plex 4	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
	PCR Mix Plex 5	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.
	Taq DNA Polymerase	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
	AR 2	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
<b>For emergency responders</b>	: PCR Mix Plex 1	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	PCR Mix Plex 2	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	PCR Mix Plex 3	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	PCR Mix Plex 4	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	PCR Mix Plex 5	If specialised clothing is required to deal with the

## Section 6. Accidental release measures

Taq DNA Polymerase

spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

AR 2

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".

**Environmental precautions** : PCR Mix Plex 1

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

PCR Mix Plex 2

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

PCR Mix Plex 3

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

PCR Mix Plex 4

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

PCR Mix Plex 5

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).

Taq DNA Polymerase

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

AR 2

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).

### Methods and material for containment and cleaning up

**Methods for cleaning up** : PCR Mix Plex 1

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

PCR Mix Plex 2

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

## Section 6. Accidental release measures

PCR Mix Plex 3	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
PCR Mix Plex 4	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
PCR Mix Plex 5	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.
Taq DNA Polymerase	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
AR 2	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

## Section 7. Handling and storage

### Precautions for safe handling

<b>Protective measures</b>	: PCR Mix Plex 1	Put on appropriate personal protective equipment (see Section 8).
	PCR Mix Plex 2	Put on appropriate personal protective equipment (see Section 8).
	PCR Mix Plex 3	Put on appropriate personal protective equipment (see Section 8).
	PCR Mix Plex 4	Put on appropriate personal protective equipment (see Section 8).
	PCR Mix Plex 5	Put on appropriate personal protective equipment (see Section 8).
	Taq DNA Polymerase	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
<b>Advice on general occupational hygiene</b>	: AR 2	Put on appropriate personal protective equipment (see Section 8).
	: PCR Mix Plex 1	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.
	PCR Mix Plex 2	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and

## Section 7. Handling and storage

PCR Mix Plex 3

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.

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.

PCR Mix Plex 4

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.

PCR Mix Plex 5

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.

Taq DNA Polymerase

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

AR 2

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.

**Conditions for safe storage, including any incompatibilities** : PCR Mix Plex 1

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.

PCR Mix Plex 2

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.

## Section 7. Handling and storage

PCR Mix Plex 3

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.

PCR Mix Plex 4

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.

PCR Mix Plex 5

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.

Taq DNA Polymerase

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.

AR 2

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.

## Section 8. Exposure controls and personal protection

### Control parameters

### Occupational exposure limits

Ingredient name	Exposure limits
Taq DNA Polymerase Glycerol	<b>Safe Work Australia (Australia, 12/2019).</b> TWA: 10 mg/m <sup>3</sup> 8 hours.

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

### 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.

## Section 9. Physical and chemical properties and safety characteristics

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

### Appearance

<b>Physical state</b>	:	PCR Mix Plex 1	Liquid.
		PCR Mix Plex 2	Liquid.
		PCR Mix Plex 3	Liquid.
		PCR Mix Plex 4	Liquid.
		PCR Mix Plex 5	Liquid.
		Taq DNA Polymerase	Liquid. [Clear. / solution]
		AR 2	Liquid.

## Section 9. Physical and chemical properties and safety characteristics

<b>Colour</b>	:	PCR Mix Plex 1	Not available.
		PCR Mix Plex 2	Not available.
		PCR Mix Plex 3	Not available.
		PCR Mix Plex 4	Not available.
		PCR Mix Plex 5	Not available.
		Taq DNA Polymerase AR 2	Colourless. Not available.
<b>Odour</b>	:	PCR Mix Plex 1	Not available.
		PCR Mix Plex 2	Not available.
		PCR Mix Plex 3	Not available.
		PCR Mix Plex 4	Not available.
		PCR Mix Plex 5	Not available.
		Taq DNA Polymerase AR 2	Not available. Not available.
<b>Odour threshold</b>	:	PCR Mix Plex 1	Not available.
		PCR Mix Plex 2	Not available.
		PCR Mix Plex 3	Not available.
		PCR Mix Plex 4	Not available.
		PCR Mix Plex 5	Not available.
		Taq DNA Polymerase AR 2	Not available. Not available.
<b>pH</b>	:	PCR Mix Plex 1	Not available.
		PCR Mix Plex 2	Not available.
		PCR Mix Plex 3	Not available.
		PCR Mix Plex 4	Not available.
		PCR Mix Plex 5	Not available.
		Taq DNA Polymerase AR 2	Not available. Not available.
<b>Melting point/freezing point</b>	:	PCR Mix Plex 1	Not available.
		PCR Mix Plex 2	Not available.
		PCR Mix Plex 3	Not available.
		PCR Mix Plex 4	Not available.
		PCR Mix Plex 5	Not available.
		Taq DNA Polymerase AR 2	Not available. Not available.
<b>Boiling point, initial boiling point, and boiling range</b>	:	PCR Mix Plex 1	Not available.
		PCR Mix Plex 2	Not available.
		PCR Mix Plex 3	Not available.
		PCR Mix Plex 4	Not available.
		PCR Mix Plex 5	Not available.
		Taq DNA Polymerase AR 2	Not available. Not available.

<b>Flash point</b>	:		<b>Closed cup</b>			<b>Open cup</b>		
		<b>Ingredient name</b>	<b>°C</b>	<b>°F</b>	<b>Method</b>	<b>°C</b>	<b>°F</b>	<b>Method</b>
		<b>PCR Mix Plex 1</b>						
		Deoxycytidine thiotriphosphate	440.851	825.5				
		<b>PCR Mix Plex 2</b>						
		Deoxycytidine thiotriphosphate	440.851	825.5				
		<b>PCR Mix Plex 3</b>						
	Deoxycytidine thiotriphosphate	440.851	825.5					
	<b>PCR Mix Plex 4</b>							

## Section 9. Physical and chemical properties and safety characteristics

Deoxycytidine thiotriphosphate	440.851	825.5			
<b>PCR Mix Plex 5</b>					
Deoxycytidine thiotriphosphate	440.851	825.5			
<b>Taq DNA Polymerase</b>					
Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	>109.85	>229.7			
Glycerol			Pensky-Martens	177	350.6

**Evaporation rate** : PCR Mix Plex 1 Not available.  
 PCR Mix Plex 2 Not available.  
 PCR Mix Plex 3 Not available.  
 PCR Mix Plex 4 Not available.  
 PCR Mix Plex 5 Not available.  
 Taq DNA Polymerase Not available.  
 AR 2 Not available.

**Flammability** : PCR Mix Plex 1 Not applicable.  
 PCR Mix Plex 2 Not applicable.  
 PCR Mix Plex 3 Not applicable.  
 PCR Mix Plex 4 Not applicable.  
 PCR Mix Plex 5 Not applicable.  
 Taq DNA Polymerase Not applicable.  
 AR 2 Not applicable.

**Lower and upper explosion limit/flammability limit** : PCR Mix Plex 1 Not available.  
 PCR Mix Plex 2 Not available.  
 PCR Mix Plex 3 Not available.  
 PCR Mix Plex 4 Not available.  
 PCR Mix Plex 5 Not available.  
 Taq DNA Polymerase Not available.  
 AR 2 Not available.

**Vapour pressure** :

Ingredient name	Vapour Pressure at 20 °C			Vapour pressure at 50 °C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
<b>PCR Mix Plex 1</b>						
Water	23.8	3.2				
N-(tri(Hydroxymethyl)methyl)glycine	<0.000015001	<0.000002				
<b>PCR Mix Plex 2</b>						
Water	23.8	3.2				
N-(tri(Hydroxymethyl)methyl)glycine	<0.000015001	<0.000002				
<b>PCR Mix Plex 3</b>						
Water	23.8	3.2				
N-(tri(Hydroxymethyl)methyl)glycine	<0.000015001	<0.000002				
<b>PCR Mix Plex 4</b>						

## Section 9. Physical and chemical properties and safety characteristics

Water	23.8	3.2				
N-(tri(Hydroxymethyl)methyl)glycine	<0.000015001	<0.000002				
<b>PCR Mix Plex 5</b>						
Water	23.8	3.2				
N-(tri(Hydroxymethyl)methyl)glycine	<0.000015001	<0.000002				
<b>Taq DNA Polymerase</b>						
Glycerol	0	0		0	0	
<b>AR 2</b>						
Water	23.8	3.2				
Betaine	0	0	EU A.4	0	0	EU A.4

**Relative vapour density** : PCR Mix Plex 1 Not available.  
 PCR Mix Plex 2 Not available.  
 PCR Mix Plex 3 Not available.  
 PCR Mix Plex 4 Not available.  
 PCR Mix Plex 5 Not available.  
 Taq DNA Polymerase Not available.  
 AR 2 Not available.

**Relative density** : PCR Mix Plex 1 Not available.  
 PCR Mix Plex 2 Not available.  
 PCR Mix Plex 3 Not available.  
 PCR Mix Plex 4 Not available.  
 PCR Mix Plex 5 Not available.  
 Taq DNA Polymerase Not available.  
 AR 2 Not available.

**Solubility** : PCR Mix Plex 1 Partially soluble in the following materials: cold water and hot water.  
 PCR Mix Plex 2 Partially soluble in the following materials: cold water and hot water.  
 PCR Mix Plex 3 Partially soluble in the following materials: cold water and hot water.  
 PCR Mix Plex 4 Partially soluble in the following materials: cold water and hot water.  
 PCR Mix Plex 5 Partially soluble in the following materials: cold water and hot water.  
 Taq DNA Polymerase Not available.  
 AR 2 Not available.

**Partition coefficient: n-octanol/water** : PCR Mix Plex 1 Not applicable.  
 PCR Mix Plex 2 Not applicable.  
 PCR Mix Plex 3 Not applicable.  
 PCR Mix Plex 4 Not applicable.  
 PCR Mix Plex 5 Not applicable.  
 Taq DNA Polymerase Not applicable.  
 AR 2 Not applicable.

**Auto-ignition temperature** :

Ingredient name	°C	°F	Method
Taq DNA Polymerase			
Glycerol	370	698	

## Section 9. Physical and chemical properties and safety characteristics

**Decomposition temperature** : PCR Mix Plex 1 Not available.  
 PCR Mix Plex 2 Not available.  
 PCR Mix Plex 3 Not available.  
 PCR Mix Plex 4 Not available.  
 PCR Mix Plex 5 Not available.  
 Taq DNA Polymerase Not available.  
 AR 2 Not available.

**Viscosity** : PCR Mix Plex 1 Not available.  
 PCR Mix Plex 2 Not available.  
 PCR Mix Plex 3 Not available.  
 PCR Mix Plex 4 Not available.  
 PCR Mix Plex 5 Not available.  
 Taq DNA Polymerase Not available.  
 AR 2 Not available.

### Particle characteristics

**Median particle size** : PCR Mix Plex 1 Not applicable.  
 PCR Mix Plex 2 Not applicable.  
 PCR Mix Plex 3 Not applicable.  
 PCR Mix Plex 4 Not applicable.  
 PCR Mix Plex 5 Not applicable.  
 Taq DNA Polymerase Not applicable.  
 AR 2 Not applicable.

## Section 10. Stability and reactivity

**Reactivity** : PCR Mix Plex 1 No specific test data related to reactivity available for this product or its ingredients.  
 PCR Mix Plex 2 No specific test data related to reactivity available for this product or its ingredients.  
 PCR Mix Plex 3 No specific test data related to reactivity available for this product or its ingredients.  
 PCR Mix Plex 4 No specific test data related to reactivity available for this product or its ingredients.  
 PCR Mix Plex 5 No specific test data related to reactivity available for this product or its ingredients.  
 Taq DNA Polymerase No specific test data related to reactivity available for this product or its ingredients.  
 AR 2 No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability** : PCR Mix Plex 1 The product is stable.  
 PCR Mix Plex 2 The product is stable.  
 PCR Mix Plex 3 The product is stable.  
 PCR Mix Plex 4 The product is stable.  
 PCR Mix Plex 5 The product is stable.  
 Taq DNA Polymerase The product is stable.  
 AR 2 The product is stable.

**Possibility of hazardous reactions** : PCR Mix Plex 1 Under normal conditions of storage and use, hazardous reactions will not occur.  
 PCR Mix Plex 2 Under normal conditions of storage and use, hazardous reactions will not occur.  
 PCR Mix Plex 3 Under normal conditions of storage and use, hazardous reactions will not occur.  
 PCR Mix Plex 4 Under normal conditions of storage and use, hazardous reactions will not occur.  
 PCR Mix Plex 5 Under normal conditions of storage and use, hazardous reactions will not occur.  
 Taq DNA Polymerase Under normal conditions of storage and use, hazardous reactions will not occur.

## Section 10. Stability and reactivity

AR 2 Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid** : PCR Mix Plex 1 No specific data.  
 PCR Mix Plex 2 No specific data.  
 PCR Mix Plex 3 No specific data.  
 PCR Mix Plex 4 No specific data.  
 PCR Mix Plex 5 No specific data.  
 Taq DNA Polymerase No specific data.  
 AR 2 No specific data.

**Incompatible materials** : PCR Mix Plex 1 May react or be incompatible with oxidising materials.  
 PCR Mix Plex 2 May react or be incompatible with oxidising materials.  
 PCR Mix Plex 3 May react or be incompatible with oxidising materials.  
 PCR Mix Plex 4 May react or be incompatible with oxidising materials.  
 PCR Mix Plex 5 May react or be incompatible with oxidising materials.  
 Taq DNA Polymerase May react or be incompatible with oxidising materials.  
 AR 2 May react or be incompatible with oxidising materials.

**Hazardous decomposition products** : PCR Mix Plex 1 Under normal conditions of storage and use, hazardous decomposition products should not be produced.  
 PCR Mix Plex 2 Under normal conditions of storage and use, hazardous decomposition products should not be produced.  
 PCR Mix Plex 3 Under normal conditions of storage and use, hazardous decomposition products should not be produced.  
 PCR Mix Plex 4 Under normal conditions of storage and use, hazardous decomposition products should not be produced.  
 PCR Mix Plex 5 Under normal conditions of storage and use, hazardous decomposition products should not be produced.  
 Taq DNA Polymerase Under normal conditions of storage and use, hazardous decomposition products should not be produced.  
 AR 2 Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Taq DNA Polymerase				
Glycerol	LD50 Oral	Rat	12600 mg/kg	-
Poly(oxy-1,2-ethanediyl), . alpha.-[ (1,1,3,3-tetramethylbutyl) phenyl]-.omega.-hydroxy-	LD50 Oral	Rat	2800 mg/kg	-

#### Irritation/Corrosion

## Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
Taq DNA Polymerase Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
Poly(oxy-1,2-ethanediyl), . alpha.-[ (1,1,3,3-tetramethylbutyl) phenyl]-.omega.-hydroxy-	Eyes - Severe irritant	Rabbit	-	1 %	-

### Sensitisation

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** :  PCR Mix Plex 1 Routes of entry anticipated: Oral, Dermal, Inhalation.  
 PCR Mix Plex 2 Routes of entry anticipated: Oral, Dermal, Inhalation.  
 PCR Mix Plex 3 Routes of entry anticipated: Oral, Dermal, Inhalation.  
 PCR Mix Plex 4 Routes of entry anticipated: Oral, Dermal, Inhalation.  
 PCR Mix Plex 5 Routes of entry anticipated: Oral, Dermal, Inhalation.  
 Taq DNA Polymerase Routes of entry anticipated: Oral, Dermal, Inhalation.  
 AR 2 Not available.

### Potential acute health effects

**Eye contact** :  PCR Mix Plex 1 No known significant effects or critical hazards.  
 PCR Mix Plex 2 No known significant effects or critical hazards.  
 PCR Mix Plex 3 No known significant effects or critical hazards.  
 PCR Mix Plex 4 No known significant effects or critical hazards.  
 PCR Mix Plex 5 No known significant effects or critical hazards.  
 Taq DNA Polymerase No known significant effects or critical hazards.  
 AR 2 No known significant effects or critical hazards.

**Inhalation** :  PCR Mix Plex 1 No known significant effects or critical hazards.  
 PCR Mix Plex 2 No known significant effects or critical hazards.  
 PCR Mix Plex 3 No known significant effects or critical hazards.  
 PCR Mix Plex 4 No known significant effects or critical hazards.  
 PCR Mix Plex 5 No known significant effects or critical hazards.  
 Taq DNA Polymerase No known significant effects or critical hazards.  
 AR 2 No known significant effects or critical hazards.

## Section 11. Toxicological information

<b>Skin contact</b>	: PCR Mix Plex 1	No known significant effects or critical hazards.
	PCR Mix Plex 2	No known significant effects or critical hazards.
	PCR Mix Plex 3	No known significant effects or critical hazards.
	PCR Mix Plex 4	No known significant effects or critical hazards.
	PCR Mix Plex 5	No known significant effects or critical hazards.
	Taq DNA Polymerase AR 2	No known significant effects or critical hazards.
<b>Ingestion</b>	: PCR Mix Plex 1	No known significant effects or critical hazards.
	PCR Mix Plex 2	No known significant effects or critical hazards.
	PCR Mix Plex 3	No known significant effects or critical hazards.
	PCR Mix Plex 4	No known significant effects or critical hazards.
	PCR Mix Plex 5	No known significant effects or critical hazards.
	Taq DNA Polymerase AR 2	No known significant effects or critical hazards.

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

<b>Eye contact</b>	: PCR Mix Plex 1	No specific data.
	PCR Mix Plex 2	No specific data.
	PCR Mix Plex 3	No specific data.
	PCR Mix Plex 4	No specific data.
	PCR Mix Plex 5	No specific data.
	Taq DNA Polymerase AR 2	No specific data.
<b>Inhalation</b>	: PCR Mix Plex 1	No specific data.
	PCR Mix Plex 2	No specific data.
	PCR Mix Plex 3	No specific data.
	PCR Mix Plex 4	No specific data.
	PCR Mix Plex 5	No specific data.
	Taq DNA Polymerase AR 2	No specific data.
<b>Skin contact</b>	: PCR Mix Plex 1	No specific data.
	PCR Mix Plex 2	No specific data.
	PCR Mix Plex 3	No specific data.
	PCR Mix Plex 4	No specific data.
	PCR Mix Plex 5	No specific data.
	Taq DNA Polymerase AR 2	No specific data.
<b>Ingestion</b>	: PCR Mix Plex 1	No specific data.
	PCR Mix Plex 2	No specific data.
	PCR Mix Plex 3	No specific data.
	PCR Mix Plex 4	No specific data.
	PCR Mix Plex 5	No specific data.
	Taq DNA Polymerase AR 2	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

## Section 11. Toxicological information

<b>General</b>	: PCR Mix Plex 1 PCR Mix Plex 2 PCR Mix Plex 3 PCR Mix Plex 4 PCR Mix Plex 5 Taq DNA Polymerase AR 2	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: PCR Mix Plex 1 PCR Mix Plex 2 PCR Mix Plex 3 PCR Mix Plex 4 PCR Mix Plex 5 Taq DNA Polymerase AR 2	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Mutagenicity</b>	: PCR Mix Plex 1 PCR Mix Plex 2 PCR Mix Plex 3 PCR Mix Plex 4 PCR Mix Plex 5 Taq DNA Polymerase AR 2	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Reproductive toxicity</b>	: PCR Mix Plex 1 PCR Mix Plex 2 PCR Mix Plex 3 PCR Mix Plex 4 PCR Mix Plex 5 Taq DNA Polymerase AR 2	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.

### Numerical measures of toxicity

#### Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
Taq DNA Polymerase					
Glycerol	12600	N/A	N/A	N/A	N/A
Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	500	N/A	N/A	N/A	N/A

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
Taq DNA Polymerase Glycerol Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Acute EC50 210 µg/l Fresh water	Algae - Selenastrum sp.	96 hours
	Acute LC50 10800 µg/l Marine water	Crustaceans - Pandalus montagui - Adult	48 hours
	Acute LC50 8600 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 7200 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours

## Section 12. Ecological information

### Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Taq DNA Polymerase Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Taq DNA Polymerase Glycerol	-1.76	-	low
Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	3.77	78.67	low

### Mobility in soil

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

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

## Section 13. Disposal considerations

**Disposal methods** : 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. 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

**ADG / IMDG / IATA** : Not regulated as Dangerous Goods according to the ADG Code .

**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.

**Transport in bulk according to IMO instruments** : Not available.

## Section 15. Regulatory information

### Standard for the Uniform Scheduling of Medicines and Poisons

Not regulated.

### Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

### International regulations

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

## Section 15. Regulatory information

Not listed.

### Montreal Protocol

Not listed.

### Stockholm Convention on Persistent Organic Pollutants

Not listed.

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

Not listed.

### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### Inventory list

<b>Australia</b>	: Not determined.
<b>Canada</b>	: Not determined.
<b>China</b>	: Not determined.
<b>Europe</b>	: Not determined.
<b>Japan</b>	: <b>Japan inventory (CSCL)</b> : Not determined. <b>Japan inventory (ISHL)</b> : Not determined.
<b>New Zealand</b>	: Not determined.
<b>Philippines</b>	: Not determined.
<b>Republic of Korea</b>	: Not determined.
<b>Taiwan</b>	: Not determined.
<b>Thailand</b>	: Not determined.
<b>Turkey</b>	: Not determined.
<b>United States</b>	: Not determined.
<b>Viet Nam</b>	: Not determined.

## Section 16. Any other relevant information

### History

**Date of issue/Date of revision** : 29/11/2021

**Date of previous issue** : 21/06/2019

**Version** : 4

### Key to abbreviations

: ADG = Australian Dangerous Goods  
 : ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road  
 : ATE = Acute Toxicity Estimate  
 : BCF = Bioconcentration Factor  
 : GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
 : IATA = International Air Transport Association  
 : IBC = Intermediate Bulk Container  
 : IMDG = International Maritime Dangerous Goods  
 : LogPow = logarithm of the octanol/water partition coefficient  
 : MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
 : N/A = Not available  
 : SUSMP = Standard Uniform Schedule of Medicine and Poisons  
 : UN = United Nations

### Procedure used to derive the classification

Classification	Justification
<b>Taq DNA Polymerase</b> LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3	Calculation method

## Section 16. Any other relevant information

**References** : Not available.

✔ Indicates information that has changed from previously issued version.

### Notice to reader

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