# SAFETY DATA SHEET

Agilent Technologies

1/19

T3 RNA Polymerase, Part Number 600111

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

1.1 Product identifier					
Product name	:	T3 RNA Polymerase, Part	Number 600111		
Part no. (chemical kit)	:	600111			
Part no.	:	5X Transcription Buffer RNA Polymerase Dilution Buffer	600110-82 600110-83		
		T3 RNA Polymerase	600111-51		
1.2 Relevant identified use			e and uses advis	sed against	
Material uses		Analytical reagent.			
		5X Transcription Buffer	Dff	1 ml	
		RNA Polymerase Dilution T3 RNA Polymerase	Buffer	1 ml 0.1 ml (5000 U	50 U/µI)
1.3 Details of the supplier Agilent Technologies LDA 5500 Lakeside Cheadle Ro Cheadle, Cheshire, SK8 30 United Kingdom Tel: +44 (0) 345 712 5292 e-mail address of person responsible for this SDS	UK oyal GR	Ltd.	.com		
1.4 Emergency telephone	nur	nber			
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	: 5X Transcription Buffer RNA Polymerase Dilution Buffer	Mixture Mixture
	T3 RNA Polymerase	Mixture
<b>Classification accordin</b>	g to Regulation (EC) No. 1272/2	2008 [CLP/GHS]
<b>5X Transcription Buffer</b> H412	LONG-TERM (CHRONIC) AQUA	ATIC HAZARD Category 3
Ingredients of unknown toxicity	n : 5X Transcription Buffer RNA Polymerase Dilution Buffer T3 RNA Polymerase	Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 1 - 10% Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 30 - 60% Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 30 - 60%

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

T3 RNA Polymerase, Part Number 600111

## **SECTION 2: Hazards identification**

Signal word	F	5X Transcription Buffer RNA Polymerase Dilution Buffer	No signal word. No signal word.
		T3 RNA Polymerase	No signal word.
Hazard statements	F	5X Transcription Buffer RNA Polymerase Dilution Buffer	H412 - Harmful to aquatic life with long lasting effects. No known significant effects or critical hazards.
		T3 RNA Polymerase	No known significant effects or critical hazards.
Precautionary statements			-
Prevention	F	5X Transcription Buffer RNA Polymerase Dilution Buffer	P273 - Avoid release to the environment. Not applicable.
		Γ3 RNA Polymerase	Not applicable.
Response	F	5X Transcription Buffer RNA Polymerase Dilution Buffer	Not applicable. Not applicable.
	٦	Γ3 RNA Polymerase	Not applicable.
Storage	F	5X Transcription Buffer RNA Polymerase Dilution Buffer	Not applicable. Not applicable.
		T3 RNA Polymerase	Not applicable.
Disposal	: 5	5X Transcription Buffer	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	[	RNA Polymerase Dilution Buffer	Not applicable.
	٦	Γ3 RNA Polymerase	Not applicable.
Hazardous ingredients		5X Transcription Buffer	Not applicable.
Supplemental label elements	F	5X Transcription Buffer RNA Polymerase Dilution Buffer	Not applicable. Not applicable.
	٦	F3 RNA Polymerase	Not applicable.
Annex XVII - Restrictions on the manufacture,	F	5X Transcription Buffer RNA Polymerase Dilution Buffer	Not applicable. Not applicable.
placing on the market and use of certain dangerous substances, mixtures and articles		Γ3 RNA Polymerase	Not applicable.
Special packaging require	men	<u>nts</u>	
Tactile warning of danger	F	5X Transcription Buffer RNA Polymerase Dilution Buffer	Not applicable. Not applicable.
		Γ3 RNA Polymerase	Not applicable.
2.3 Other hazards			
Product meets the criteria for PBT or vPvB	: 5	5X Transcription Buffer	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
according to Regulation (EC) No. 1907/2006, Annex XIII	[	RNA Polymerase Dilution Buffer Г3 RNA Polymerase	This mixture does not contain any substances that are assessed to be a PBT or a vPvB. This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
Other hazards which do not result in	F	5X Transcription Buffer RNA Polymerase Dilution Buffer	None known. None known.
classification		T3 RNA Polymerase	None known.

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

3.1 Substances : 5X	Transcription Buffer	Mixture		
RN	A Polymerase Dilution Buffer RNA Polymerase	Mixture Mixture		
Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Туре
5X Transcription Buffer				
Trometamol	EC: 201-064-4 CAS: 77-86-1	≤3	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
Sodium chloride	EC: 231-598-3 CAS: 7647-14-5	≤3	Eye Irrit. 2, H319	[1]
Magnesium chloride	EC: 232-094-6 CAS: 7786-30-3	≤1	Aquatic Chronic 1, H410 (M=1)	[1]
RNA Polymerase Dilution Buffer				
Glycerol	REACH #: Annex V EC: 200-289-5 CAS: 56-81-5	≥50 - ≤75	Not classified.	[2]
T3 RNA Polymerase				
Glycerol	REACH #: Annex V EC: 200-289-5 CAS: 56-81-5	≥50 - ≤75	Not classified.	[2]
			See Section 16 for the full text of the H statements declared above.	

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

#### <u>Type</u>

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

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

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

[5] Substance of equivalent concern

[6] Additional disclosure due to company policy

### SECTION 4: First aid measures

### 4.1 Description of first aid measures

Eye contact	: 5X Transcription Buffer	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.
	RNA Polymerase	Immediately flush eyes with plenty of water, occasionally
	Dilution Buffer	lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	T3 RNA Polymerase	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	: 5X Transcription Buffer	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. In case of inhalation of decomposition products in a fire, symptoms may be delayed.

## **SECTION 4: First aid measures**

	RNA Polymerase Dilution Buffer T3 RNA Polymerase	The exposed person may need to be kept under medical surveillance for 48 hours. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	: 5X Transcription Buffer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	RNA Polymerase Dilution Buffer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	T3 RNA Polymerase	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	: 5X Transcription Buffer	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.
	RNA Polymerase Dilution Buffer	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	T3 RNA Polymerase	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Protection of first-aiders	: 5X Transcription Buffer RNA Polymerase Dilution Buffer T3 RNA 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. No action shall be taken involving any personal risk or without suitable training. No action shall be taken involving any personal risk or without suitable training.

### 4.2 Most important symptoms and effects, both acute and delayed <u>Potential acute health effects</u>

Eye contact	: 5X Transcription Buffer RNA Polymerase Dilution Buffer	No known significant effects or critical hazards. No known significant effects or critical hazards.	
	T3 RNA Polymerase	No known significant effects or critical hazards.	
Inhalation	: 5X Transcription Buffer RNA Polymerase Dilution Buffer	No known significant effects or critical hazards. No known significant effects or critical hazards.	
	T3 RNA Polymerase	No known significant effects or critical hazards.	

### **SECTION 4: First aid measures**

	ald medsures	
Skin contact	: 5X Transcription Buffe	r No known significant effects or critical hazards.
	RNA Polymerase Dilution Buffer	No known significant effects or critical hazards.
	T3 RNA Polymerase	No known significant effects or critical hazards.
Ingestion	: 5X Transcription Buffer RNA Polymerase Dilution Buffer	No known significant effects or critical hazards.
	T3 RNA Polymerase	No known significant effects or critical hazards.
Over-exposure signs/s	<u>ymptoms</u>	
Eye contact	: 5X Transcription Buffe	r No specific data.
	RNA Polymerase Dilution Buffer	No specific data.
	T3 RNA Polymerase	No specific data.
Inhalation	: 5X Transcription Buffer RNA Polymerase	r No specific data. No specific data.
	Dilution Buffer	
	T3 RNA Polymerase	No specific data.
Skin contact	: 5X Transcription Buffe	•
	RNA Polymerase Dilution Buffer	No specific data.
	T3 RNA Polymerase	No specific data.
Ingestion	: 5X Transcription Buffe	r No specific data.
	RNA Polymerase Dilution Buffer	No specific data.
	T3 RNA Polymerase	No specific data.

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

Notes to physician	: 5X Transcription Buffer RNA Polymerase Dilution Buffer T3 RNA Polymerase	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: 5X Transcription Buffer RNA Polymerase Dilution Buffer T3 RNA Polymerase	No specific treatment. No specific treatment. No specific treatment.

## **SECTION 5: Firefighting measures**

### 5.1 Extinguishing media

Suitable extinguishing media	: 5X Transcription Buffer RNA Polymerase Dilution Buffer	Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire.	
	T3 RNA Polymerase	Use an extinguishing agent suitable for the surrounding fire.	
Unsuitable extinguishing media	: 5X Transcription Buffer RNA Polymerase Dilution Buffer	None known. None known.	
	T3 RNA Polymerase	None known.	

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

Hazards from the substance or mixture	: 5X Transcription Buffer	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.
	RNA Polymerase Dilution Buffer T3 RNA Polymerase	In a fire or if heated, a pressure increase will occur and the container may burst. In a fire or if heated, a pressure increase will occur and the

Date of issue/Date of revision	: 19/05/2022	Date of previous issue	:09/09/2019	Version : 4	5/19
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SECTION 5. Fileng	ining measures	
		container may burst.
Hazardous combustion products	: 5X Transcription Buffer	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides
	RNA Polymerase Dilution Buffer	Decomposition products may include the following materials:
		carbon dioxide carbon monoxide
	T3 RNA Polymerase	Decomposition products may include the following materials: carbon dioxide carbon monoxide
5.3 Advice for firefighters		
Special precautions for fire-fighters	: 5X Transcription Buffer	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
	RNA Polymerase Dilution Buffer	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
	T3 RNA 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.
Special protective equipment for fire- fighters	: 5X Transcription 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.
	RNA Polymerase Dilution 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.
	T3 RNA Polymerase	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 5: Firefighting measures**

## **SECTION 6: Accidental release measures**

For non-emergency personnel	: 5X Transcription Buffer	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put
	RNA Polymerase Dilution Buffer	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.
	T3 RNA 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. Put on

<b>SECTION 6: Accide</b>	ntal release measu	res
		appropriate personal protective equipment.
For emergency responders	: 5X Transcription 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".
	RNA Polymerase Dilution 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".
	T3 RNA Polymerase	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	: 5X Transcription 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). Water polluting material. May be harmful to the environment if released in large quantities.
	RNA Polymerase Dilution 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).
	T3 RNA 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).
6.3 Methods and material f	or containment and cleani	ng up
Methods for cleaning up	: 5X Transcription 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.
	RNA Polymerase Dilution 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.
	T3 RNA 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.
6.4 Reference to other sections		ency contact information. ation on appropriate personal protective equipment. ional waste treatment information.
SECTION 7: Handlin	ng and storage	

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Protective measures	: 5X Transcription Buffer	Put on appropriate personal p Section 8). Do not ingest. Av clothing. Avoid breathing vap the environment. Keep in the approved alternative made fro tightly closed when not in use product residue and can be h container.	void contact with eyes, sk our or mist. Avoid releas original container or an om a compatible material . Empty containers retair azardous. Do not reuse	in and e to , kept 1
	RNA Polymerase	Put on appropriate personal p	protective equipment (see	
Date of issue/Date of revision	: 19/05/2022 Date of previou	s issue : 09/09/2019	Version : 4	7/19

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SECTION	7. Hand	dlina and	storado

	Dilution Buffer T3 RNA Polymerase	Section 8). Put on appropriate personal protective equipment (see
		Section 8).
Advice on general occupational hygiene	: 5X Transcription Buffer	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	RNA Polymerase Dilution Buffer	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	T3 RNA 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.
7.2 Conditions for safe stor	age, including any incomp	atibilities
Storage	: 5X Transcription Buffer	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
	RNA Polymerase Dilution Buffer	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
	T3 RNA 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.
7.3 Specific end use(s)		
	: 5X Transcription Buffer	Industrial applications, Professional applications.
Recommendations	RNA Polymerase Dilution Buffer	Industrial applications, Professional applications.

### **SECTION 7: Handling and storage**

Industrial sector specific solutions	: 5X Transcription Buffer RNA Polymerase	Not available. Not available.
	Dilution Buffer T3 RNA Polymerase	Not available.

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

### 8.1 Control parameters

#### **Occupational exposure limits**

Product/ingredient name	Exposure limit values
RNA Polymerase Dilution Buffer	<b>EH40/2005 WELs (United Kingdom (UK), 1/2020).</b>
Glycerol	TWA: 10 mg/m³ 8 hours. Form: Mist
T3 RNA Polymerase	<b>EH40/2005 WELs (United Kingdom (UK), 1/2020).</b>
Glycerol	TWA: 10 mg/m³ 8 hours. Form: Mist

Recommended monitoring procedures

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

### **DNELs/DMELs**

Product/ingredient name	Туре	Exposure	Value	Population	Effects
5X Transcription Buffer					
Trometamol	DNEL	Long term Oral	8.3 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	29 mg/m³	General population	Systemic
	DNEL	Long term Dermal	83.3 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	117.5 mg/ m³	Workers	Systemic
	DNEL	Long term Dermal	166.7 mg/ kg bw/day	Workers	Systemic
Sodium chloride	DNEL	Short term Oral	126.65 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Oral	126.65 mg/ kg bw/day	General population	Systemic
	DNEL	Short term Dermal	126.65 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Dermal	126.65 mg/ kg bw/day	General population	Systemic
	DNEL	Short term Dermal	295.52 mg/ kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	295.52 mg/ kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	443.28 mg/	General population	Systemic
	DNEL	Long term Inhalation	443.28 mg/ m <sup>3</sup>	General	Systemic
	DNEL	Short term Inhalation	2068.62 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term	2068.62	Workers	Systemic

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### SECTION 8: Exposure controls/personal protection Magnesium chloride DNEL Inhalation Long term Oral mg/m³ 7 mg/kg bw/day General population Systemic

**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 meas	<u>sures</u>
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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### **SECTION 9: Physical and chemical properties**

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

### 9.1 Information on basic physical and chemical properties

Appearance		
Physical state	: 5X Transcription Buffer RNA Polymerase Dilution Buffer T3 RNA Polymerase	Liquid. Liquid. Liquid.
Colour	: 5X Transcription Buffer RNA Polymerase Dilution Buffer T3 RNA Polymerase	Not available. Not available. Not available.

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## **SECTION 9: Physical and chemical properties**

		and chemical p	•								
Odour	-	5X Transcription Buffe RNA Polymerase Dilution Buffer			available. available.						
		T3 RNA Polymerase		Not a	available.						
Odour threshold	:	5X Transcription Buffe RNA Polymerase Dilution Buffer		Not a	available. available.						
		T3 RNA Polymerase			available.						
Melting point/freezing point	:	5X Transcription Buffe RNA Polymerase Dilution Buffer T3 RNA Polymerase			available. available.						
Initial boiling point and boiling range	:	5X Transcription Buffe RNA Polymerase Dilution Buffer T3 RNA Polymerase		Not a	C (212°F available. available.						
Flammability (solid, gas)		5X Transcription Buffe			applicable						
Tunnubinty (solid, gus)	Ì	RNA Polymerase Dilution Buffer T3 RNA Polymerase	ļ	Not a	applicable	Э.					
Upper/lower flammability or explosive limits	:	5X Transcription Buffe RNA Polymerase Dilution Buffer	er	Not a	available. available.						
		T3 RNA Polymerase		Not a	available.						
Flash point	:	5X Transcription Buffe RNA Polymerase Dilution Buffer		Not a	available. available.					_	
		T3 RNA Polymerase	F	[Pro	duct doe	s not s	sustain c	ombu	stio	n.]	
				С	losed cu	ıp				Open o	cup
		Ingredient name	°C		°F	Met	hod	°C		°F	Method
		RNA Polymerase Dilution Buffer									
		-	>100	:	>212	DIN 51	1758				
		Dilution Buffer	>100 >110		>212 >230	DIN 5'	1758				
		Dilution Buffer Edetic acid (R*,R*) -1,4-Dimercaptobutane-				DIN 5 <sup>7</sup>	1758				
		Dilution Buffer Edetic acid (R*,R*) -1,4-Dimercaptobutane- 2,3-diol		:		DIN 5'					
		Dilution Buffer Edetic acid (R*,R*) -1,4-Dimercaptobutane- 2,3-diol T3 RNA Polymerase	>110	:	>230						
Auto-ignition	:	Dilution Buffer Edetic acid (R*,R*) -1,4-Dimercaptobutane- 2,3-diol T3 RNA Polymerase Edetic acid (R*,R*) -1,4-Dimercaptobutane-	>110 >100	:	>230 >212					Method	
Auto-ignition temperature	:	Dilution Buffer Edetic acid (R*,R*) -1,4-Dimercaptobutane- 2,3-diol T3 RNA Polymerase Edetic acid (R*,R*) -1,4-Dimercaptobutane- 2,3-diol	>110 >100 >110	:	>230 >212 >230		1758			Method	
	:	Dilution Buffer Edetic acid (R*,R*) -1,4-Dimercaptobutane- 2,3-diol T3 RNA Polymerase Edetic acid (R*,R*) -1,4-Dimercaptobutane- 2,3-diol Ingredient name	>110 >100 >110	:	>230 >212 >230		1758			Method	
	:	Dilution Buffer Edetic acid (R*,R*) -1,4-Dimercaptobutane- 2,3-diol T3 RNA Polymerase Edetic acid (R*,R*) -1,4-Dimercaptobutane- 2,3-diol Ingredient name RNA Polymerase Dilution	>110 >100 >110	:	>230 >212 >230		1758			<b>Method</b> 2263	
	:	Dilution Buffer Edetic acid (R*,R*) -1,4-Dimercaptobutane- 2,3-diol T3 RNA Polymerase Edetic acid (R*,R*) -1,4-Dimercaptobutane- 2,3-diol Ingredient name RNA Polymerase Dilution Glycerol	>110 >100 >110	:	>230 >212 >230 <b>°C</b> 370		1758 <b>°F</b> 698				
		Dilution Buffer Edetic acid (R*,R*) -1,4-Dimercaptobutane- 2,3-diol T3 RNA Polymerase Edetic acid (R*,R*) -1,4-Dimercaptobutane- 2,3-diol Ingredient name RNA Polymerase Dilution Glycerol Edetic acid	>110 >100 >110	:	>230 >212 >230 <b>°C</b> 370		1758 <b>°F</b> 698				
	:	Dilution Buffer Edetic acid (R*,R*) -1,4-Dimercaptobutane- 2,3-diol T3 RNA Polymerase Edetic acid (R*,R*) -1,4-Dimercaptobutane- 2,3-diol Ingredient name RNA Polymerase Dilution Glycerol Edetic acid T3 RNA Polymerase	>110 >100 >110	:	>230 >212 >230 <b>°C</b> 370 >400		1758 <b>°F</b> 698 >752		VDI		
	:	Dilution Buffer Edetic acid (R*,R*) -1,4-Dimercaptobutane- 2,3-diol T3 RNA Polymerase Edetic acid (R*,R*) -1,4-Dimercaptobutane- 2,3-diol Ingredient name RNA Polymerase Dilution Glycerol Edetic acid T3 RNA Polymerase Glycerol	>110 >100 >110 <b>Buffer</b>	r Not a	>230 >212 >230 <b>°C</b> 370 >400 370	DIN 5	<ul> <li><b>°F</b></li> <li>698</li> <li>&gt;752</li> <li>698</li> </ul>		VDI	2263	

## **SECTION 9: Physical and chemical properties**

рН	:	5X Transcription Buffe RNA Polymerase Dilution Buffer T3 RNA Polymerase	er 8 7.7 7.7					
Viscosity	:	5X Transcription Buffe RNA Polymerase Dilution Buffer		t available. t available.				
		T3 RNA Polymerase	No	t available.				
Solubility(ies)	:	5X Transcription Buffe RNA Polymerase Dilution Buffer	wa Ea: wa	ter. sily soluble ter.	in the follov	ving mater	ials: cold w	vater and hot
		T3 RNA Polymerase		sily soluble ter.	in the follow	ving mater	ials: cold w	ater and hot
Partition coefficient: n- octanol/water	:	5X Transcription Buffe RNA Polymerase Dilution Buffer	er No	t applicable t applicable				
		T3 RNA Polymerase		t applicable				
Vapour pressure			Vapou	r Pressur	e at 20°C	Va	pour pres	sure at 50°C
		Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
		5X Transcription Buffer						
		water	23.8	3.2		92.258	12.3	
		Trometamol	<0.0007500	6 <0.0001				
		RNA Polymerase Dilution Buffer						
		water	23.8	3.2		92.258	12.3	
		Glycerol	0.000075	0.00001		0.0025	0.00033	
		T3 RNA Polymerase						
		water	23.8	3.2		92.258	12.3	
		Glycerol	0.000075	0.00001		0.0025	0.00033	
Evaporation rate	:	5X Transcription Buffe RNA Polymerase Dilution Buffer T3 RNA Polymerase	No	t available. t available. t available.				
Relative density	:	5X Transcription Buffe RNA Polymerase Dilution Buffer T3 RNA Polymerase	No	t available. t available. t available.				
Vapour density	:	5X Transcription Buffe RNA Polymerase Dilution Buffer T3 RNA Polymerase	No	t available. t available. t available.				
Explosive properties	:	5X Transcription Buffe RNA Polymerase Dilution Buffer T3 RNA Polymerase	er Not Not	available. available. available. available.				
Oxidising properties	:	5X Transcription Buffe RNA Polymerase Dilution Buffer T3 RNA Polymerase	No	t available. t available. t available.				

## **SECTION 9: Physical and chemical properties**

: 5X Transcription Buffer RNA Polymerase Dilution Buffer	Not applicable. Not applicable.
T3 RNA Polymerase	Not applicable.
	RNA Polymerase Dilution Buffer

#### 9.2 Other information

No additional information.

SECTION 10: Stabi	lity and reactivity
10.1 Reactivity	<ul> <li>5X Transcription Buffer</li> <li>RNA Polymerase</li> <li>Dilution Buffer</li> <li>T3 RNA Polymerase</li> <li>No specific test data related to reactivity available for this product or its ingredients.</li> <li>No specific test data related to reactivity available for this product or its ingredients.</li> <li>No specific test data related to reactivity available for this product or its ingredients.</li> <li>No specific test data related to reactivity available for this product or its ingredients.</li> </ul>
10.2 Chemical stability	: 5X Transcription Buffer RNA PolymeraseThe product is stable. The product is stable.Dilution Buffer T3 RNA PolymeraseThe product is stable.
10.3 Possibility of hazardous reactions	<ul> <li>5X Transcription Buffer</li> <li>RNA Polymerase</li> <li>Dilution Buffer</li> <li>T3 RNA Polymerase</li> <li>Under normal conditions of storage and use, hazardous reactions will not occur.</li> <li>Under normal conditions of storage and use, hazardous reactions will not occur.</li> <li>Under normal conditions of storage and use, hazardous reactions will not occur.</li> </ul>
10.4 Conditions to avoid	<ul> <li>5X Transcription Buffer No specific data.</li> <li>RNA Polymerase No specific data.</li> <li>Dilution Buffer</li> <li>T3 RNA Polymerase No specific data.</li> </ul>
10.5 Incompatible materials	<ul> <li>5X Transcription Buffer RNA Polymerase Dilution Buffer T3 RNA Polymerase</li> <li>May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials.</li> <li>May react or be incompatible with oxidising materials.</li> </ul>
10.6 Hazardous decomposition products	<ul> <li>5X Transcription Buffer</li> <li>RNA Polymerase</li> <li>Dilution Buffer</li> <li>T3 RNA Polymerase</li> <li>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</li> <li>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</li> <li>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</li> </ul>

## **SECTION 11: Toxicological information**

### **11.1 Information on toxicological effects**

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
5X Transcription Buffer				
Trometamol	LD50 Dermal	Rat	>5000 mg/kg	-
Sodium chloride	LD50 Oral	Rat	3000 mg/kg	-
Magnesium chloride	LD50 Dermal	Rat - Male,	>2000 mg/kg	-
-		Female		
	LD50 Oral	Rat	2800 mg/kg	-

#### Acute toxicity estimates

## **SECTION 11: Toxicological information**

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	
5X Transcription Buffer					
Sodium chloride	3000	N/A	N/A	N/A	N/A
Magnesium chloride	2800	N/A	N/A	N/A	N/A

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
5X Transcription Buffer					
Trometamol	Skin - Moderate irritant	Rabbit	-	25 %	-
	Skin - Severe irritant	Rabbit	-	500 mg	-
Sodium chloride	Eyes - Moderate irritant	Rabbit	-	24 hours 100	-
				mg	
	Eyes - Moderate irritant	Rabbit	-	10 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500	-
				mg	

<b>Conclusion/Summary</b>	÷	Not available.
Mutagenicity		
<b>Conclusion/Summary</b>	:	Not available.
Carcinogenicity		
<b>Conclusion/Summary</b>	:	Not available.
Reproductive toxicity		
<b>Conclusion/Summary</b>	:	Not available.
Teratogenicity		
<b>Conclusion/Summary</b>	÷	Not available.
Specific target organ toxic	ity	<u> (single exposure)</u>

Not available.

### Specific target organ toxicity (repeated exposure) Not available.

#### **Aspiration hazard**

Not available.

Information on likely routes of exposure	: 5X Transcription Buffer RNA Polymerase Dilution Buffer T3 RNA Polymerase	Routes of entry anticipated: Oral, Dermal, Inhalation. Routes of entry anticipated: Oral, Dermal, Inhalation. Routes of entry anticipated: Oral, Dermal, Inhalation.
Potential acute health ef	fects	
Inhalation	: 5X Transcription Buffer RNA Polymerase Dilution Buffer T3 RNA Polymerase	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Ingestion	: 5X Transcription Buffer RNA Polymerase Dilution Buffer T3 RNA Polymerase	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Skin contact	: 5X Transcription Buffer RNA Polymerase Dilution Buffer T3 RNA Polymerase	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

## **SECTION 11: Toxicological information**

	: 5X Transcription Buffer No known significant effects or critical hazards	
Eye contact	: 5X Transcription Buffer No known significant effects or critical hazards RNA Polymerase No known significant effects or critical hazards Dilution Buffer	
	T3 RNA Polymerase No known significant effects or critical hazards	3.
Symptoms related to the	nysical, chemical and toxicological characteristics	
Inhalation	: 5X Transcription Buffer No specific data. RNA Polymerase No specific data. Dilution Buffer	
	T3 RNA Polymerase No specific data.	
Ingestion	: 5X Transcription BufferNo specific data.RNA PolymeraseNo specific data.Dilution BufferT3 RNA PolymeraseNo specific data.	
Skin contact	<ul> <li>5X Transcription Buffer No specific data.</li> <li>RNA Polymerase No specific data.</li> <li>Dilution Buffer</li> <li>T3 RNA Polymerase No specific data.</li> </ul>	
Eye contact	: 5X Transcription Buffer No specific data.	
Lye contact	RNA Polymerase No specific data. Dilution Buffer	
	T3 RNA Polymerase No specific data.	
-	ects 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	ects	
General	: 5X Transcription Buffer RNA Polymerase Dilution Buffer TO RNA Polymerase Dilution Buffer	5.
O and a second alter	T3 RNA Polymerase No known significant effects or critical hazards	
Carcinogenicity	: 5X Transcription Buffer RNA Polymerase Dilution Buffer T2 RNA Delymerase No known significant effects or critical hazards	5.
Mutagonicity	T3 RNA Polymerase No known significant effects or critical hazards : 5X Transcription Buffer No known significant effects or critical hazards	
Mutagenicity	: 5X Transcription Buffer No known significant effects or critical hazards RNA Polymerase No known significant effects or critical hazards Dilution Buffer	
	T3 RNA Polymerase No known significant effects or critical hazards	3.
Reproductive toxicity	: 5X Transcription Buffer RNA Polymerase Dilution Buffer	5.
	T3 RNA Polymerase No known significant effects or critical hazards	
Other information	: 5X Transcription Buffer Adverse symptoms may include the following: skin sensitisation. RNA Polymerase Not available.	way cause
	Dilution Buffer	
	T3 RNA Polymerase Adverse symptoms may include the following: skin sensitisation.	May cause

## **SECTION 12: Ecological information**

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
5X Transcription Buffer			
Trometamol	Acute EC50 >980 mg/l Fresh water	Daphnia	48 hours
	Acute NOEC 520 mg/l Fresh water	Daphnia	48 hours
Sodium chloride	Acute EC50 2430000 µg/l Fresh water	Algae - Navicula seminulum	96 hours
	Acute EC50 519.6 mg/l Fresh water	Crustaceans - Cypris subglobosa	48 hours
	Acute EC50 402.6 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute IC50 6.87 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
	Acute LC50 1000000 µg/l Fresh water	Fish - Morone saxatilis - Larvae	96 hours
	Chronic LC10 781 mg/l Fresh water	Crustaceans - Hyalella azteca - Juvenile (Fledgling, Hatchling, Weanling)	3 weeks
	Chronic NOEC 6 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
	Chronic NOEC 0.314 g/L Fresh water	Daphnia - Daphnia pulex	21 days
	Chronic NOEC 100 mg/l Fresh water	Fish - Gambusia holbrooki - Adult	8 weeks
Magnesium chloride	Acute EC50 >100 mg/l Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Acute EC50 180000 µg/l Fresh water	Crustaceans - Eudiaptomus padanus ssp. padanus - Adult	48 hours
	Acute IC50 6.8 mg/l Fresh water	Aquatic plants - Lemna aequinoctialis	96 hours
	Acute LC50 32000 µg/l Fresh water	Daphnia - Daphnia hyalina - Adult	48 hours
	Acute LC50 2120 mg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute NOEC 100 mg/l Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Chronic NOEC 0.1 mg/l Fresh water	Fish - Cyprinus carpio	35 days

### **12.2 Persistence and degradability**

Product/ingredient name	Test	Result		Dose		Inoculum
5X Transcription Buffer Trometamol	OECD 301F Ready Biodegradability - Manometric Respirometry Test		Readily - 28 days	30 mg/l		-
Product/ingredient name	Aquatic half-life	Photolysis			Biodeg	radability
5X Transcription Buffer Trometamol	-	-			Readily	

### 12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
5X Transcription Buffer			
Trometamol	-2.31	-	low

### 12.4 Mobility in soil

Soil/water partition coefficient (Koc)	: Not available.
Mobility	: Not available.

### 12.5 Results of PBT and vPvB assessment

Date of issue/Date of revision	: 19/05/2022	Date of previous issue	: 09/09/2019	Version : 4	16/19
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## **SECTION 12: Ecological information**

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

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

### **SECTION 13: Disposal considerations**

13.1 Waste treatment meth	ods
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	: The classification of the product may meet the criteria for a hazardous waste.
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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## **SECTION 14: Transport information**

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

**Additional information** 

14.6 Special precautions for user

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

14.7 Transport in bulk according to IMO instruments

: Not available.

## **SECTION 15: Regulatory information**

	•	
		tion specific for the substance or mixture
EU Regulation (EC) No.		
Annex XIV - List of su Annex XIV	bstances subject to authorisation	1
None of the component	nts are listed	
Substances of very h		
None of the component		
•		on the market and use of certain dangerous
substances, mixtures		
Label	: 5X Transcription Buffer RNA Polymerase Dilution Buffer T3 RNA Polymerase	Not applicable. Not applicable.
Other EU regulations	13 KNA Folymerase	Not applicable.
	stances (1005/2009/EU)	
Not listed.		
Prior Informed Conse Not listed.	<u>nt (PIC) (649/2012/EU)</u>	
Persistent Organic Po Not listed.	<u>ellutants</u>	
Seveso Directive		
	rolled under the Seveso Directive.	
International regulation	<u>15</u>	
Chemical Weapon Con	vention List Schedules I, II & III C	hemicals
Not listed.		
Montreal Protocol		
Not listed.		
Stockholm Convention	on Persistent Organic Pollutants	
Not listed.	on reisistent organier ondtante	2
	on Prior Informed Consent (PIC)	
Not listed.		
	ol on POPs and Heavy Metals	
Not listed.		
Inventory list		
Australia	: Not determined.	
Canada	: At least one component is no NDSL.	ot listed in DSL but all such components are listed in
China	: All components are listed or	•
Europe	: All components are listed or	•
Japan	: Japan inventory (CSCL): N Japan inventory (ISHL): No	ot determined.
New Zealand	: All components are listed or	exempted.
Philippines	: Not determined.	
Republic of Korea	: Not determined.	
Taiwan	: All components are listed or	exempted.
Thailand	: Not determined.	
Turkey	: Not determined.	

Date of previous issue

### **SECTION 15: Regulatory information**

United States	: All components are active or exempted.
Viet Nam	: 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	<ul> <li>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</li> </ul>

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

Classification	Justification
5X Transcription Buffer Aquatic Chronic 3, H412	Calculation method

### Full text of abbreviated H statements

5X Transcription Buffer	
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

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

<b>5X Transcription Buffer</b> Aquatic Chronic 1 Aquatic Chronic 3 Eye Irrit. 2 Skin Irrit. 2		LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 SKIN CORROSION/IRRITATION - Category 2
Date of issue/ Date of revision	: 19/05/2022	
Date of previous issue	: 09/09/2019	
Version Notice to reader	: 4	

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