

# SAFETY DATA SHEET

## 2X RT PCR Master Mix

### Section 1. Identification

**Product Identifier:** 2X RT PCR Master Mix  
**Product code:** 45808, 43904, 23702, 47902, 35502, 50503, 39904, 35506, 39102, 39803, 39703, 43802, 37702, 33702, 33705, 38902, 27910, EPM2000, EPM4000, SGM2000, SGM4000, TMM4100, TMM2000, TMM2500, TMM4000, DxTMM2000, 41403, 38602, 33402, 34203, 51903, 39002, 48002, 28341, 28342, 37604, 34703

**Product Type:** Liquid

**Supplier's details:** Norgen Biotek Corporation  
3430 Schmon Parkway  
Thorold, ON  
Canada L2V 4Y6  
Tel: (905) 227-8848  
Fax: (905) 227-1061  
Toll Free: 1-866-667-4362  
E-mail: [techsupport@norgenbiotek.com](mailto:techsupport@norgenbiotek.com)

**Emergency telephone CHEMTREC number (with hours of operation):** U.S. & Canada: 1-800-424-9300

### Section 2. Hazard Identification

**Classification of the Substance or mixture:** Not a dangerous substance or mixture

**GHS label elements**

**Hazard Pictograms:** Not a dangerous substance or mixture

**Signal Word:** Not a dangerous substance or mixture

**Hazard Statements:** Not a dangerous substance or mixture

**Precautionary statements:**

**Prevention:** Not applicable

**Response:** Not applicable

**Storage:** Not applicable.

**Disposal:** Not applicable.

### Section 3. Composition/information on ingredients

**Substance/mixture:** Mixture

**Other means of identification:**

Ingredient name	% (w/w)	CAS number
Tris Hydrochloride	10-50	1185-53-1
Ammonium Sulfate	10-50	7883-20-2
Potassium Chloride	10-50	7447-40-7
Magnesium Sulfate	<5	7487-88-9
Octylphenol polyethoxyethanol	<2	9036-19-5

Ranges id listed above for hazardous ingredient(s) are prescribed ranges. The actual concentration(s) or actual concentration range(s) are being withheld as a trade secret.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified 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**

- Eye Contact:** 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 20 minutes. Get medical attention.
- Inhalation:** 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.
- Skin contact:** Flush contaminated skin with plenty of water. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion:** Wash out mouth with water. Remove dentures if any. If material has been swallowed and 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.

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

**Potential acute health effects**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

**Over-exposure signs/symptoms**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

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

Data not available.

See toxicological information (Section 11)

**Section 5. Fire-fighting measures**

**Extinguishing media**

**Suitable extinguishing**

**media:** Use water spray, dry chemical powder, carbon dioxide or alcohol-resistant foam.

**Unsuitable**

**extinguishing media:** Carbon oxides, nitrogen oxides, hydrogen chloride gas

**Specific hazards**

**arising from the**

**chemical:** Not available

**Hazardous thermal**

**decomposition**

**products:** Not available

**Special protective**

**actions for**

**fire-fighters:** Not available

**Special protective**

**equipment for**

**fire-fighters:** Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

**Section 6. Accidental release measures**

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

**For non-emergency**

**personnel:** Ensure adequate ventilation. Use personal protective equipment as required.

**For emergency**

**responders:** Not available

**Environmental**

**precautions:**

Should not be released into the environment. Dispose of the material following local, regional or international regulations.

**Methods and materials for containment and cleaning up**

Clean up spills immediately, observing precautions in the safety data sheet and label. Dispose into chemical waste container

**Section 7. Handling and storage**

**Precautions for safe handling**

**Protective measures:** Use with adequate ventilation as necessary or desired

**Advice on general occupational**

**hygiene:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse

**Conditions for safe storage, including**

**incompatibilities:** Not available

**Section 8. Exposure controls/personal protection**

**Control parameters**

**Occupational exposure limits**

There is no data available

**Appropriate engineering**

**controls:** Handle in accordance with good industrial hygiene and safety practice.

**Environmental**

**exposure controls:** Do not let product enter drains.

**Individual protection measures**

**Hygiene measures:** If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario

**Eye/face protection:** Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**

**Hand protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body protection:** Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

**Other skin protection:** Not applicable

**Respiratory protection:** Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## 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:**

**Physical State:** Liquid

**Color:** Clear

**Odor:** Not available.

**Odor threshold:** Not available.

**pH:** 8

**Melting point/  
freezing point:** Not applicable.

**Boiling point, initial  
boiling point, and  
boiling range:** Not available.

**Flash point:** Not applicable.

**Evaporation rate:** Not available.

**Flammability:** Not available.

**Lower and upper  
explosion limit/  
flammability limit:** Not available.

**Vapor pressure:** Not available.

**Relative vapor  
density:** Not available.

**Relative density:** Not available.

**Solubility:** Miscible in water.

**Partition coefficient:  
n-octanol/water** Not applicable.

**Auto-ignition  
temperature:** Not available.

**Decomposition  
temperature:** Not available.

**Viscosity:** Not available.

**Flow time  
(ISO 2431):** Not available.

**Particle characteristics**

**Median particle size:** Not applicable.

## Section 10. Stability and reactivity

- Reactivity:** No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability:** The product is stable.
- Possibility of hazardous reactions:** Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid:** No specific data.
- Incompatible materials:** Reactive or incompatible with the following materials; oxidizing materials, acids and alkalis.
- Hazardous decomposition products:** Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicology information

### Information on toxicology effects

#### Acute toxicity

There is no data available.

#### Irritation/Corrosion

There is no data available.

#### Sensitization

There is no data available.

#### Mutagenicity

There is no data available.

#### Carcinogenicity

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC..

#### Reproductive toxicity

There is no significant hazard.

#### Teratogenicity

There is no significant hazard.

#### Specific target organ toxicity (single exposure)

There is no significant hazard.

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

There is no data available.

#### Aspiration hazard

There is no data available.

#### **Information on the likely routes of exposure:**

There is no significant hazard..

**Potential acute health effects**

**Eye contact:** There is no significant hazard.  
**Inhalation:** There is no significant hazard.  
**Skin contact:** There is no significant hazard.  
**Ingestion:** There is no significant hazard.

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

**Eye contact:** There is no significant hazard.  
**Inhalation:** There is no significant hazard.  
**Skin contact:** There is no significant hazard.  
**Ingestion:** There is no significant hazard..

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

**Short term exposure**

**Potential immediate effects:** There is no significant hazard..  
**Potential delayed effects:** There is no significant hazard.

**Long term exposure**

**Potential immediate effects:** There is no significant hazard.  
**Potential delayed effects:** There is no significant hazard.

**Potential chronic health effects**

**General:** There is no significant hazard.  
**Carcinogenicity:** There is no significant hazard.  
**Mutagenicity:** There is no significant hazard.  
**Reproductive toxicity:** There is no significant hazard.

**Numerical measures of toxicity**

**Acute toxicity estimates**

There is not data available

**Section 12. Ecological information**

**Toxicity**

There is no data available.

**Persistence and degradability**

There is no data available.

**Mobility in soil**

**Soil/water partition coefficient (K<sub>oc</sub>):** There is no data available

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

### Section 13. Disposal considerations

**Disposal methods:** The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should 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 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. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

### Section 14. Transport information

	<b>TGD Classification</b>	<b>DOT Classification (US)</b>	<b>IMGD</b>	<b>IATA</b>
<b>UN number</b>	Not regulated.	Not regulated.	Not regulated.	Not regulated.
<b>UN proper shipping name</b>	-	-	-	-
<b>Transport hazard class(es)</b>	-	-	-	-
<b>Packing group</b>	-	-	-	-
<b>Environmental hazards</b>	No.	No.	No.	No.

**AERG:** Not applicable.

**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**

**Canadian lists**

**Canadian NPRI:** None of the components are listed.  
Hydrochloric Acid

**CEPA Toxic substances:** None of the components are listed.

**International regulations**

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

Not listed

**Montreal Protocol**

Not listed

**Stockholm Convention on Persistent Organic Pollutants**

Not listed

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

Not listed

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

**Inventory list**

**Canada:** All components are listed or exempted.

**Section 16. Other information**

**History**

**Date of issue/Date of revision:**

07/23/2024

**Date of previous issue:**

12/15/2021

**Version:**

00

**Prepared by:** Norgen Biotek Corp.

**Key to abbreviations:** ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
HPR = Hazardous Products Regulations  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogP<sub>ow</sub> = 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)  
SGG = Segregation Group  
UN = United Nations

**Procedure used to derive the classification**

<b>Classification</b>	<b>Justification</b>
Not a dangerous substance or mixture	-

**Notice to reader**

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

# SAFETY DATA SHEET

## N/ORF1ab/RP Positive Control

### Section 1. Identification

<b>Product Identifier:</b>	<b>N/ORF1ab/RP Positive Control</b>
<b>Product code:</b>	<b>DxPC67302, PC67302, PC67322</b>
<b>Product Type:</b>	<b>Liquid</b>
<b>Supplier's details:</b>	Norgen Biotek Corporation 3430 Schmon Parkway Thorold, ON Canada L2V 4Y6 Tel: (905) 227-8848 Fax: (905) 227-1061 Toll Free: 1-866-667-4362 E-mail: <a href="mailto:techsupport@norgenbiotek.com">techsupport@norgenbiotek.com</a>
<b>Emergency telephone number (with hours of operation):</b>	CHEMTREC U.S. & Canada: 1-800-424-9300

### Section 2. Hazard Identification

<b>Classification of the Substance or mixture:</b>	Not a dangerous substance or mixture
<b><u>GHS label elements</u></b>	
<b>Hazard Pictograms:</b>	Not a dangerous substance or mixture
<b>Signal Word:</b>	Not a dangerous substance or mixture
<b>Hazard Statements:</b>	Not a dangerous substance or mixture
<b><u>Precautionary statements:</u></b>	
<b>Prevention:</b>	Not applicable
<b>Response:</b>	Not applicable
<b>Storage:</b>	Not applicable.
<b>Disposal:</b>	Not applicable.

**Section 3. Composition/information on ingredients**

**Substance/mixture:** Mixture

**Other means of identification:** Not applicable

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified 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**

- Eye Contact:** 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 20 minutes. Get medical attention.
- Inhalation:** 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.
- Skin contact:** Flush contaminated skin with plenty of water. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion:** Wash out mouth with water. Remove dentures if any. If material has been swallowed and 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.

**Most important symptoms/effects, acute and delayed****Potential acute health effects**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

**Over-exposure signs/symptoms**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

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

Data not available.

See toxicological information (Section 11)

## **Section 5. Fire-fighting measures**

### **Extinguishing media**

#### **Suitable extinguishing**

**media:** Use water spray, dry chemical powder, carbon dioxide or alcohol-resistant foam.

#### **Unsuitable**

**extinguishing media:** Carbon oxides, nitrogen oxides, hydrogen chloride gas

#### **Specific hazards**

#### **arising from the**

#### **chemical:**

Not available

#### **Hazardous thermal**

#### **decomposition**

#### **products:**

Not available

#### **Special protective**

#### **actions for**

#### **fire-fighters:**

Not available

#### **Special protective**

#### **equipment for**

#### **fire-fighters:**

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

## **Section 6. Accidental release measures**

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

#### **For non-emergency**

#### **personnel:**

Ensure adequate ventilation. Use personal protective equipment as required.

#### **For emergency**

#### **responders:**

Not available

#### **Environmental**

#### **precautions:**

Should not be released into the environment. Dispose of the material following local, regional or international regulations.

### **Methods and materials for containment and cleaning up**

Clean up spills immediately, observing precautions in the safety data sheet and label. Dispose into chemical waste container

## **Section 7. Handling and storage**

### **Precautions for safe handling**

**Protective measures:** Use with adequate ventilation as necessary or desired

#### **Advice on general**

**occupational hygiene:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse

**Conditions for safe storage, including incompatibilities:** Not available

## **Section 8. Exposure controls/personal protection**

### **Control parameters**

#### **Occupational exposure limits**

There are no significant effects or critical hazards

### **Appropriate engineering**

**controls:** Handle in accordance with good industrial hygiene and safety practice.

### **Environmental**

**exposure controls:** Do not let product enter drains.

### **Individual protection measures**

**Hygiene measures:** If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario

**Eye/face protection:** Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

### **Skin protection**

**Hand protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body protection:** Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

### **Other skin**

**protection:** Not applicable

### **Respiratory**

**protection:** Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## 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>	Liquid
<b>Color:</b>	Clear
<b>Odor:</b>	Not available.
<b>Odor threshold:</b>	Not available.
<b>pH:</b>	8
<b>Melting point/ freezing point:</b>	Not applicable.
<b>Boiling point, initial boiling point, and boiling range:</b>	Not available.
<b>Flash point:</b>	Not applicable.
<b>Evaporation rate:</b>	Not available.
<b>Flammability:</b>	Not available.
<b>Lower and upper explosion limit/ flammability limit:</b>	Not available.
<b>Vapor pressure:</b>	Not available.
<b>Relative vapor density:</b>	Not available.
<b>Relative density:</b>	Not available.
<b>Solubility:</b>	Miscible in water.
<b>Partition coefficient: n-octanol/water</b>	Not applicable.
<b>Auto-ignition temperature:</b>	Not available.
<b>Decomposition temperature:</b>	Not available.
<b>Viscosity:</b>	Not available.
<b>Flow time (ISO 2431):</b>	Not available.
<b><u>Particle characteristics</u></b>	
<b>Median particle size:</b>	Not applicable.

## Section 10. Stability and reactivity

<b>Reactivity:</b>	No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical stability:</b>	The product is stable.
<b>Possibility of hazardous reactions:</b>	Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid:</b>	No specific data.

**Incompatible materials:** Reactive or incompatible with the following materials; oxidizing materials, acids and alkalies.

**Hazardous decomposition products:** Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## **Section 11. Toxicology information**

### **Information on toxicology effects**

#### **Acute toxicity**

No information available

#### **Irritation/Corrosion**

No information available

#### **Sensitization**

There is no data available.

#### **Mutagenicity**

There is no data available.

#### **Carcinogenicity**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC..

#### **Reproductive toxicity**

There is no data available.

#### **Teratogenicity**

There is no data available.

#### **Specific target organ toxicity (single exposure)**

There is no data available.

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

There is no data available.

#### **Aspiration hazard**

There is no data available.

### **Information on the likely routes of**

**exposure:** There is no data available.

### **Potential acute health effects**

**Eye contact:** There are no significant effects or critical hazards

**Inhalation:** There are no significant effects or critical hazards

**Skin contact:** There are no significant effects or critical hazards

**Ingestion:** There are no significant effects or critical hazards



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

**Eye contact:** There are no significant effects or critical hazards  
**Inhalation:** There are no significant effects or critical hazards  
**Skin contact:** There are no significant effects or critical hazards  
**Ingestion:** There are no significant effects or critical hazards

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

**Short term exposure**

**Potential immediate effects:** There are no significant effects or critical hazards.  
**Potential delayed effects:** There are no significant effects or critical hazards

**Long term exposure**

**Potential immediate effects:** There are no significant effects or critical hazards  
**Potential delayed effects:** There are no significant effects or critical hazards

**Potential chronic health effects**

**General:** There are no significant effects or critical hazards  
**Carcinogenicity:** There are no significant effects or critical hazards  
**Mutagenicity:** There are no significant effects or critical hazards  
**Reproductive toxicity:** There are no significant effects or critical hazards

**Numerical measures of toxicity**

**Acute toxicity estimates**

There is not data available

**Section 12. Ecological information**

**Toxicity**

There is no data available

**Persistence and degradability**

There is no data available.

**Mobility in soil**

**Soil/water partition coefficient ( $K_{oc}$ ):** There is no data available

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

**Section 13. Disposal considerations**

**Disposal methods:** The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should 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 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. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**Section 14. Transport information**

	<b>TGD Classification</b>	<b>DOT Classification (US)</b>	<b>IMGD</b>	<b>IATA</b>
<b>UN number</b>	Not regulated.	Not regulated.	Not regulated.	Not regulated.
<b>UN proper shipping name</b>	-	-	-	-
<b>Transport hazard class(es)</b>	-	-	-	-
<b>Packing group</b>	-	-	-	-
<b>Environmental hazards</b>	No.	No.	No.	No.

**AERG:** Not applicable.

**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**

**Canadian lists**

**Canadian NPRI:** None of the components are listed.

**CEPA Toxic substances:** None of the components are listed.

**International regulations**

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

Not listed

**Montreal Protocol**

Not listed

**Stockholm Convention on Persistent Organic Pollutants**

Not listed

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

Not listed

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

Not Listed

**Inventory list**

**Canada:** All components are listed or exempted.

<b>Section 16. Other information</b>
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**History**

**Date of issue/Date**

**of revision:** 07/17/2024

**Date of previous**

**issue:** 12/15/2021

**Version:** 00

**Prepared by:** Norgen Biotek Corp.

**Key to abbreviations:** ATE = Acute Toxicity Estimate  
 BCF = Bioconcentration Factor  
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
 HPR = Hazardous Products Regulations  
 IATA = International Air Transport Association  
 IBC = Intermediate Bulk Container  
 IMDG = International Maritime Dangerous Goods  
 LogP<sub>ow</sub> = 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)  
 SGG = Segregation Group  
 UN = United Nations

**Procedure used to derive the classification**

Classification	Justification
Not a dangerous substance or mixture	-

**Notice to reader**

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

**Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.**

# SAFETY DATA SHEET

## N/ORF1ab/RP Primer & Probe Mix

### Section 1. Identification

<b>Product Identifier:</b>	N/ORF1ab/RP Primer & Probe Mix
<b>Product code:</b>	N/A
<b>Product Type:</b>	Liquid
<b>Supplier's details:</b>	Norgen Biotek Corporation 3430 Schmon Parkway Thorold, ON Canada L2V 4Y6 Tel: (905) 227-8848 Fax: (905) 227-1061 Toll Free: 1-866-667-4362 E-mail: <a href="mailto:techsupport@norgenbiotek.com">techsupport@norgenbiotek.com</a>
<b>Emergency telephone number (with hours of operation):</b>	CHEMTREC U.S. & Canada: 1-800-424-9300

### Section 2. Hazard Identification

<b>Classification of the Substance or mixture:</b>	Not a dangerous substance or mixture
<b><u>GHS label elements</u></b>	
<b>Hazard Pictograms:</b>	Not a dangerous substance or mixture
<b>Signal Word:</b>	Not a dangerous substance or mixture
<b>Hazard Statements:</b>	Not a dangerous substance or mixture
<b><u>Precautionary statements:</u></b>	
<b>Prevention:</b>	Not applicable
<b>Response:</b>	Not applicable
<b>Storage:</b>	Not applicable.
<b>Disposal:</b>	Not applicable.

### Section 3. Composition/information on ingredients

**Substance/mixture:** Mixture

**Other means of identification:** Not applicable

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified 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

- Eye Contact:** 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 20 minutes. Get medical attention.
- Inhalation:** 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.
- Skin contact:** Flush contaminated skin with plenty of water. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion:** Wash out mouth with water. Remove dentures if any. If material has been swallowed and 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.

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

##### Potential acute health effects

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

##### Over-exposure signs/symptoms

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

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

Data not available.

See toxicological information (Section 11)

## **Section 5. Fire-fighting measures**

### **Extinguishing media**

#### **Suitable extinguishing**

**media:** Use water spray, dry chemical powder, carbon dioxide or alcohol-resistant foam.

#### **Unsuitable**

**extinguishing media:** Carbon oxides, nitrogen oxides, hydrogen chloride gas

#### **Specific hazards**

#### **arising from the**

#### **chemical:**

Not available

#### **Hazardous thermal**

#### **decomposition**

#### **products:**

Not available

#### **Special protective**

#### **actions for**

#### **fire-fighters:**

Not available

#### **Special protective**

#### **equipment for**

#### **fire-fighters:**

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

## **Section 6. Accidental release measures**

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

#### **For non-emergency**

#### **personnel:**

Ensure adequate ventilation. Use personal protective equipment as required.

#### **For emergency**

#### **responders:**

Not available

#### **Environmental**

#### **precautions:**

Should not be released into the environment. Dispose of the material following local, regional or international regulations.

### **Methods and materials for containment and cleaning up**

Clean up spills immediately, observing precautions in the safety data sheet and label. Dispose into chemical waste container

## **Section 7. Handling and storage**

### **Precautions for safe handling**

**Protective measures:** Use with adequate ventilation as necessary or desired

#### **Advice on general**

**occupational hygiene:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse

**Conditions for safe storage, including incompatibilities:** Not available

## **Section 8. Exposure controls/personal protection**

### **Control parameters**

#### **Occupational exposure limits**

There are no significant effects or critical hazards

### **Appropriate engineering**

**controls:** Handle in accordance with good industrial hygiene and safety practice.

### **Environmental**

**exposure controls:** Do not let product enter drains.

### **Individual protection measures**

**Hygiene measures:** If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario

**Eye/face protection:** Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

### **Skin protection**

**Hand protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body protection:** Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

### **Other skin**

**protection:** Not applicable

### **Respiratory**

**protection:** Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).



## 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>	Liquid
<b>Color:</b>	Clear
<b>Odor:</b>	Not available.
<b>Odor threshold:</b>	Not available.
<b>pH:</b>	8
<b>Melting point/ freezing point:</b>	Not applicable.
<b>Boiling point, initial boiling point, and boiling range:</b>	Not available.
<b>Flash point:</b>	Not applicable.
<b>Evaporation rate:</b>	Not available.
<b>Flammability:</b>	Not available.
<b>Lower and upper explosion limit/ flammability limit:</b>	Not available.
<b>Vapor pressure:</b>	Not available.
<b>Relative vapor density:</b>	Not available.
<b>Relative density:</b>	Not available.
<b>Solubility:</b>	Miscible in water.
<b>Partition coefficient: n-octanol/water</b>	Not applicable.
<b>Auto-ignition temperature:</b>	Not available.
<b>Decomposition temperature:</b>	Not available.
<b>Viscosity:</b>	Not available.
<b>Flow time (ISO 2431):</b>	Not available.
<b><u>Particle characteristics</u></b>	
<b>Median particle size:</b>	Not applicable.

## Section 10. Stability and reactivity

<b>Reactivity:</b>	No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical stability:</b>	The product is stable.
<b>Possibility of hazardous reactions:</b>	Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid:</b>	No specific data.

**Incompatible materials:**

Reactive or incompatible with the following materials; oxidizing materials, acids and alkalies.

**Hazardous decomposition products:**

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**Section 11. Toxicology information**

**Information on toxicology effects**

**Acute toxicity**

No information available

**Irritation/Corrosion**

No information available

**Sensitization**

There is no data available.

**Mutagenicity**

There is no data available.

**Carcinogenicity**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC..

**Reproductive toxicity**

There is no data available.

**Teratogenicity**

There is no data available.

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

There is no data available.

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

There is no data available.

**Aspiration hazard**

There is no data available.

**Information on the likely routes of**

**exposure:** There is no data available.

**Potential acute health effects**

**Eye contact:** There are no significant effects or critical hazards

**Inhalation:** There are no significant effects or critical hazards

**Skin contact:** There are no significant effects or critical hazards

**Ingestion:** There are no significant effects or critical hazards

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

**Eye contact:** There are no significant effects or critical hazards

**Inhalation:** There are no significant effects or critical hazards

**Skin contact:** There are no significant effects or critical hazards

**Ingestion:** There are no significant effects or critical hazards

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

**Short term exposure**

**Potential immediate**

**effects:** There are no significant effects or critical hazards.

**Potential delayed**

**effects:** There are no significant effects or critical hazards

**Long term exposure**

**Potential immediate**

**effects:** There are no significant effects or critical hazards

**Potential delayed**

**effects:** There are no significant effects or critical hazards

**Potential chronic health effects**

**General:** There are no significant effects or critical hazards

**Carcinogenicity:** There are no significant effects or critical hazards

**Mutagenicity:** There are no significant effects or critical hazards

**Reproductive**

**toxicity:** There are no significant effects or critical hazards

**Numerical measures of toxicity**

**Acute toxicity estimates**

There is not data available

**Section 12. Ecological information**

**Toxicity**

There is no data available

**Persistence and degradability**

There is no data available.

**Mobility in soil**

**Soil/water partition**

**coefficient ( $K_{oc}$ ):** There is no data available

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

**Section 13. Disposal considerations**

**Disposal methods:** The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should 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 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. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**Section 14. Transport information**

	<b>TGD Classification</b>	<b>DOT Classification (US)</b>	<b>IMGD</b>	<b>IATA</b>
<b>UN number</b>	Not regulated.	Not regulated.	Not regulated.	Not regulated.
<b>UN proper shipping name</b>	-	-	-	-
<b>Transport hazard class(es)</b>	-	-	-	-
<b>Packing group</b>	-	-	-	-
<b>Environmental hazards</b>	No.	No.	No.	No.

**AERG:** Not applicable.

**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**

**Canadian lists**

**Canadian NPRI:** None of the components are listed.

**CEPA Toxic substances:** None of the components are listed.

**International regulations**

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

Not listed

**Montreal Protocol**

Not listed

**Stockholm Convention on Persistent Organic Pollutants**

Not listed

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

Not listed

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

Not Listed

**Inventory list**

**Canada:** All components are listed or exempted.

<b>Section 16. Other information</b>
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**History**

**Date of issue/Date**

**of revision:** 07/17/2024

**Date of previous**

**issue:** 12/15/2021

**Version:** 00

**Prepared by:** Norgen Biotek Corp.

**Key to abbreviations:** ATE = Acute Toxicity Estimate  
 BCF = Bioconcentration Factor  
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
 HPR = Hazardous Products Regulations  
 IATA = International Air Transport Association  
 IBC = Intermediate Bulk Container  
 IMDG = International Maritime Dangerous Goods  
 LogP<sub>ow</sub> = 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)  
 SGG = Segregation Group  
 UN = United Nations

**Procedure used to derive the classification**

Classification	Justification
Not a dangerous substance or mixture	-

**Notice to reader**

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

**Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.**

# SAFETY DATA SHEET

## Nuclease free water

### Section 1. Identification

**Product Identifier:** Nuclease free water  
**Product code:** 54801  
**Product Type:** Liquid

**Supplier's details:** Norgen Biotek Corporation  
3430 Schmon Parkway  
Thorold, ON  
Canada L2V 4Y6  
Tel: (905) 227-8848  
Fax: (905) 227-1061  
Toll Free: 1-866-667-4362  
E-mail: [techsupport@norgenbiotek.com](mailto:techsupport@norgenbiotek.com)

**Emergency telephone number (with hours of operation):** CHEMTREC  
U.S. & Canada: 1-800-424-9300

### Section 2. Hazard Identification

**Classification of the Substance or mixture:** Not a dangerous substance or mixture

**GHS label elements**

**Hazard Pictograms:** Not a dangerous substance or mixture

**Signal Word:** Not a dangerous substance or mixture

**Hazard Statements:** Not a dangerous substance or mixture

**Precautionary statements:**

**Prevention:** Not applicable

**Response:** Not applicable

**Storage:** Not applicable.

**Disposal:** Not applicable.

**Section 3. Composition/information on ingredients**

**Substance/mixture:** Mixture

**Other means of identification:**

<b>Ingredient name</b>	<b>% (w/w)</b>	<b>CAS number</b>
Nuclease free water	>98	7732-18-5

Ranges id listed above for hazardous ingredient(s) are prescribed ranges. The actual concentration(s) or actual concentration range(s) are being withheld as a trade secret.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified 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**

- Eye Contact:** 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 20 minutes. Get medical attention.
- Inhalation:** 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.
- Skin contact:** Flush contaminated skin with plenty of water. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion:** Wash out mouth with water. Remove dentures if any. If material has been swallowed and 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.

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

**Potential acute health effects**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

**Over-exposure signs/symptoms**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated



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

Not applicable.

See toxicological information (Section 11)

**Section 5. Fire-fighting measures**

**Extinguishing media**

**Suitable extinguishing**

**media:** Use water spray, dry chemical powder, carbon dioxide or alcohol-resistant foam.

**Unsuitable**

**extinguishing media:** No unsuitable extinguishing media

**Specific hazards**

**arising from the**

**chemical:** Not applicable

**Hazardous thermal**

**decomposition**

**products:** Not applicable

**Special protective**

**actions for**

**fire-fighters:** Not applicable

**Special protective**

**equipment for**

**fire-fighters:** Not applicable

**Section 6. Accidental release measures**

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

**For non-emergency**

**personnel:** Not applicable.

**For emergency**

**responders:** Not applicable

**Environmental**

**precautions:** Not applicable

**Methods and materials for containment and cleaning up**

Clean up spills immediately, observing precautions in the safety data sheet and label. Dispose into chemical waste container

**Section 7. Handling and storage**

**Precautions for safe handling**

**Protective measures:** Not applicable  
**Advice on general occupational hygiene:** Not applicable  
**Conditions for safe storage, including incompatibilities:** Not applicable

## **Section 8. Exposure controls/personal protection**

### Control parameters

#### Occupational exposure limits

Not applicable

#### Appropriate engineering controls:

Handle in accordance with good industrial hygiene and safety practice.

#### Environmental exposure controls:

Do not let product enter drains.

### Individual protection measures

**Hygiene measures:** If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario

**Eye/face protection:** Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

### Skin protection

**Hand protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body protection:** Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

### Other skin protection:

Not applicable

### Respiratory protection:

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## **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>	Liquid
<b>Color:</b>	Not available
<b>Odor:</b>	Not available.
<b>Odor threshold:</b>	Not available.
<b>pH:</b>	7
<b>Melting point/ freezing point:</b>	Not applicable.
<b>Boiling point, initial boiling point, and boiling range:</b>	Not available.
<b>Flash point:</b>	Not applicable.
<b>Evaporation rate:</b>	Not available.
<b>Flammability:</b>	Not available.
<b>Lower and upper explosion limit/ flammability limit:</b>	Not available.
<b>Vapor pressure:</b>	Not available.
<b>Relative vapor density:</b>	Not available.
<b>Relative density:</b>	Not available.
<b>Solubility:</b>	Miscible in water.
<b>Partition coefficient: n-octanol/water</b>	Not applicable.
<b>Auto-ignition temperature:</b>	Not available.
<b>Decomposition temperature:</b>	Not available.
<b>Viscosity:</b>	Not available.
<b>Flow time (ISO 2431):</b>	Not available.
<b><u>Particle characteristics</u></b>	
<b>Median particle size:</b>	Not applicable.

## **Section 10. Stability and reactivity**

<b>Reactivity:</b>	No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical stability:</b>	The product is stable.
<b>Possibility of hazardous reactions:</b>	Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid:</b>	No specific data.

- Incompatible materials:** Reactive or incompatible with the following materials; oxidizing materials, acids and alkalis.
- Hazardous decomposition products:** Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## **Section 11. Toxicology information**

### **Information on toxicology effects**

#### **Acute toxicity**

Not applicable

#### **Irritation/Corrosion**

No information available

#### **Sensitization**

There is no data available.

#### **Mutagenicity**

There is no data available.

#### **Carcinogenicity**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC..

#### **Reproductive toxicity**

There is no data available.

#### **Teratogenicity**

There is no data available.

#### **Specific target organ toxicity (single exposure)**

There is no data available.

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

There is no data available.

#### **Aspiration hazard**

There is no data available.

### **Information on the likely routes of**

**exposure:** There is no data available.

#### **Potential acute health effects**

**Eye contact:** There is no data available.

**Inhalation:** There is no data available.

**Skin contact:** There is no data available.

**Ingestion:** There is no data available.

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

**Eye contact:** There is no data available.

**Inhalation:** There is no data available.

**Skin contact:** There is no data available.

**Ingestion:** There is no data available.

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

**Short term exposure**

**Potential immediate**

**effects:** There is no data available.

**Potential delayed**

**effects:** There is no data available.

**Long term exposure**

**Potential immediate**

**effects:** There is no data available.

**Potential delayed**

**effects:** There is no data available.

**Potential chronic health effects**

**General:** There is no data available.

**Carcinogenicity:** There is no data available.

**Mutagenicity:** There is no data available.

**Reproductive**

**toxicity:** There is no data available.

**Numerical measures of toxicity**

**Acute toxicity estimates**

There is not data available

**Section 12. Ecological information**

**Toxicity**

Not applicable

**Persistence and degradability**

There is no data available.

**Mobility in soil**

**Soil/water partition**

**coefficient ( $K_{oc}$ ):** No data available

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

**Section 13. Disposal considerations**

**Disposal methods:** The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should 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 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. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**Section 14. Transport information**

	<b>TGD Classification</b>	<b>DOT Classification (US)</b>	<b>IMGD</b>	<b>IATA</b>
<b>UN number</b>	Not regulated.	Not regulated.	Not regulated.	Not regulated.
<b>UN proper shipping name</b>	-	-	-	-
<b>Transport hazard class(es)</b>	-	-	-	-
<b>Packing group</b>	-	-	-	-
<b>Environmental hazards</b>	No.	No.	No.	No.

**AERG:** Not applicable.

**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**

**Canadian lists**

**Canadian NPRI:** None of the components are listed.

Hydrochloric Acid

**CEPA Toxic substances:** None of the components are listed.

**International regulations**

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

Not listed

**Montreal Protocol**

Not listed

**Stockholm Convention on Persistent Organic Pollutants**

Not listed

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

Not listed

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

**Inventory list**

**Canada:** All components are listed or exempted.

**Section 16. Other information**

**History**

**Date of issue/Date**

**of revision:** 07/12/2024

**Date of previous**

**issue:** 12/15/2021

**Version:** 00

**Prepared by:** Norgen Biotek Corp.

**Key to abbreviations:** ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

HPR = Hazardous Products Regulations

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogP<sub>ow</sub> = 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)

SGG = Segregation Group

UN = United Nations

**Procedure used to derive the classification**

<b>Classification</b>	<b>Justification</b>
Not a dangerous substance or mixture	-

**Notice to reader**

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.