

SAFETY DATA SHEET

Lyophilized Trichinella spiralis Positive Control

Section 1. Identification

Product Identifier:	Lyophilized <i>Trichinella spiralis</i> Positive Control
Product code:	PC72453L
Product Type:	Solid
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: <u>techsupport@norgenbiotek.com</u>
Emergency telephone	CHEMTREC
number (with hours	U.S. & Canada: 1-800-424-9300

Section 2. Hazard Identification

Classification of the Substance or mixture:	Not a Hazardous Mixture.
<u>GHS label elements</u> Hazard Pictograms: Signal Word: Hazard Statements:	No hazard pictogram required. No signal word required. No hazard statement(s) required
Precautionary statements: Prevention: Response:	No precautionary statement(s) required) Not applicable. Not applicable.

of operation):

Section 2. Hazard Identification

Storage: Disposal: Not applicable.

osal: Not applicable.

Section 3. Composition/information on ingredients

Substance/mixture:Mixture.Other means ofNot 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.



Section 4. First-aid measures

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact:	In case of contact with eyes, rinse out with water. Remove contact lenses.
Inhalation:	If inhaled, move patient to fresh air.
Skin contact:	In case of skin contact, rinse skin with water. Remove contaminated clothing.
Ingestion:	In case of ingestion, do not induce vomiting. Drink water. Consult a doctor if
-	feeling unwell.

Over-exposure signs/symptoms

Eye contact:	Possible irritation.
Inhalation:	Possible cough, possible irritation.
Skin contact:	Possible irritation.
Ingestion:	Possible stomach pains.

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

Notes to physician:	Not applicable.
Specific treatments:	No data available.
Protection of	
first-aiders:	No data available.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

<u>Extinguishing media</u> Suitable extinguishin media:	g Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable	
extinguishing media:	For this mixture no limitations of extinguishing agents are given.
Specific hazards	
arising from the	
chemical:	Not combustible. Ambient fire may liberate hazardous vapours.
Hazardous thermal	
decomposition	
products:	None.
Special protective actions for	
fire-fighters: Special protective	In the event of fire, wear self-contained breathing apparatus.
equipment for fire-fighters:	In the event of fire, wear self-contained breathing apparatus.



Section 6. Accidental release measures

Personal precautions, protective equipment, and emergency procedures

For non-emergency	
personnel:	Advice for non-emergency personnel: Do not breathe vapors, aerosols. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.
For emergency	
responders:	Advice for emergency responders: Do not breathe vapors, aerosols. Evacuate the danger area, observe emergency procedures. For personal protection see section 8.
Environmental	
precautions:	No special precautionary measures necessary.
Methods and materia	als for containment and cleaning up
Small spill:	Dilute with water. Wipe up with absorbent pad.
Large spill:	Observe possible material restrictions (see sections 7 and 10). Take up with liquid absorbent material. Dispose of properly. Clean up affected area.

Section 7. Handling and storage

Precautions for safe handlingProtective measures:For precautions see section 2.Advice on generaloccupationalhygiene:Wear appropriate PPE (if any) when handling.Conditions for safestorage, includingincompatibilities:No special storage conditions required. Keep tightly closed.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Contains no substances with occupational exposure limit values.

Appropriate engineering
controls:Not required.Environmental
exposure controls:Not required.

Individual protection measures Hygiene measures: No data available.



Eye/face protection: No data available.

Skin protection	
Hand protection:	Not required.
Body protection:	Not required.
Other skin	
protection:	Not required.
Respiratory	
protection:	Not required.

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:	Solid.
Color:	Colourless.
Odor:	Not available.
Odor threshold:	Not available.
pH:	Not available.
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:	Not applicable.
n-octanol/water	
Auto-ignition	
temperature:	Not available.



Decompositiontemperature:Not available.Viscosity:Not available.Flow timeIso 2431):(ISO 2431):Not available.Particle characteristicsMedian 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: Possibility of	The product is stable.
hazardous reactions: Conditions to avoid: Incompatible	Under normal conditions of storage and use, hazardous reactions will not occur. No specific data.
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

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

Irritation/Corrosion

To the best of our knowledge, this mixture is not considered an irritant or corrosive.

Sensitization

There is no data available.

Mutagenicity

There is no data available.

Carcinogenicity

There is no data available.

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:

Most likely routes of exposure are: Inhalation, Ingestion, skin contact. No hazards known for listed routes of exposure.

Potential acute health effects

Eye contact:	No data available.
Inhalation:	No data available.
Skin contact:	No data available.
Ingestion:	No data available.

Symptoms related to the physical, chemical, and toxicological characteristics

Eye contact:	No data available.
Inhalation:	No data available.
Skin contact:	No data available.
Ingestion:	No data available.

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

Short term exposure Potential immediate No data available. effects: Potential delayed effects: No data available. Long term exposure Potential immediate effects: No data available. Potential delayed effects: No data available. Potential chronic health effects General: No data available. No data available. Carcinogenicity: Mutagenicity: No data available.



Reproductive

toxicity:

No data available.

Numerical measures of toxicity

Acute toxicity estimates

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

Section 12. Ecological information

<u>Toxicity</u>	
There is no data available.	
Persistence and degradability	ity
There is no data available.	
<u>Mobility in soil</u>	
Soil/water partition	
coefficient (K _{oc}):	Not available.
Other adverse effects:	No known significant effect or critical hazards.

Section 13. Disposal considerations

Disposal methods:

ethods: 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 nonrecyclable 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

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

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

<u>Canadian lists</u>		
Canadian NPRI:	The following components are listed: No listed components	
CEPA Toxic		
substances:	None of the components are listed.	
International regulation	uns de la companya de	
Chemical Weapon Con	vention 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.	



Section 16. Other information

History	

Date of issue/Date	
of revision:	08/09/2024
Date of previous	
issue:	N/A
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 Ait Transport Association
	IBC = Intermediate Bulk Container
	IMDG = International Maritime Dangerous Goods
	LogP _{OW} = 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
Non-Hazardous	This mixture does not contain hazardous components

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: Product code: Product Type:	Nuclease-Free Water 28000 and Dx28000 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
F	

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 Hazardous substance.
<u>GHS label elements</u> Hazard Pictograms: Signal Word: Hazard Statements:	No hazard pictogram required. No signal word required. No hazard statement(s) required
Precautionary statements: Prevention: Response:	No precautionary statement(s) required) Not applicable. Not applicable.



Section 2. Hazard Identification

Storage:NoDisposal:No

Not applicable. Not applicable.

Section 3. Composition/information on ingredients

Substance/mixture:Substance.Other means ofNot 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.



Section 4. First-aid measures

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact:	In case of contact with eyes, rinse out with water. Remove contact lenses.
Inhalation:	If inhaled, move patient to fresh air.
Skin contact:	In case of skin contact, rinse skin with water. Remove contaminated clothing.
Ingestion:	In case of ingestion, do not induce vomiting. Drink water. Consult a doctor if
	feeling unwell.

Over-exposure signs/symptoms

Eye contact:	Possible irritation.
Inhalation:	Possible cough, possible irritation.
Skin contact:	Possible irritation.
Ingestion:	Possible stomach pains.

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

Notes to physician:	Not applicable.
Specific treatments:	No data available.
Protection of	
first-aiders:	No data available.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

<u>Extinguishing media</u> Suitable extinguishin media:	g Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable	
extinguishing media:	For this substance no limitations of extinguishing agents are given.
Specific hazards	
arising from the	
chemical:	Not combustible. Ambient fire may liberate hazardous vapours.
Hazardous thermal decomposition	
products:	None.
Special protective actions for fire-fighters:	In the event of fire, wear self-contained breathing apparatus.
Special protective equipment for fire-fighters:	In the event of fire, wear self-contained breathing apparatus.



Section 6. Accidental release measures

Personal precauti	ons, protective equipment, and emergency procedures
For non-emergen	су
personnel:	Advice for non-emergency personnel: Do not breathe vapors, aerosols. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.
For emergency	
responders:	Advice for emergency responders: Do not breathe vapors, aerosols. Evacuate the danger area, observe emergency procedures. For personal protection see section 8.
Environmental	
precautions:	No special precautionary measures necessary.
Methods and mat	terials for containment and cleaning up
Small spill:	Dilute with water. Wipe up with absorbent pad.
Large spill:	Observe possible material restrictions (see sections 7 and 10). Take up with liquid absorbent material. Dispose of properly. Clean up affected area.

Section 7. Handling and storage

Precautions for safe handlingProtective measures:For precautions see section 2.Advice on generaloccupationalhygiene:Wear appropriate PPE (if any) when handling.Conditions for safestorage, includingincompatibilities:No special storage conditions required. Keep tightly closed.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Contains no substances with occupational exposure limit values.

Appropriate engineering
controls:Not required.Environmental
exposure controls:Not required.

Individual protection measures Hygiene measures: No data available.



Eye/face protection: No data available.

Skin protection	
Hand protection:	Not required.
Body protection:	Not required.
Other skin	
protection:	Not required.
Respiratory	
protection:	Not required.

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:	Colourless.
Odor:	Not available.
Odor threshold:	Not available.
pH:	Not available.
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:	Not applicable.
n-octanol/water	
Auto-ignition	
temperature:	Not available.



Decomposition	
temperature:	Not available.
Viscosity:	Not available.
Flow time	
(ISO 2431):	Not available.
Particle characteristic	<u>:s</u>
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: Possibility of	The product is stable.
hazardous reactions: Conditions to avoid: Incompatible	Under normal conditions of storage and use, hazardous reactions will not occur. No specific data.
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

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

Irritation/Corrosion

To the best of our knowledge, this substance is not considered an irritant or corrosive.

Sensitization

There is no data available.

Mutagenicity

There is no data available.

Carcinogenicity

There is no data available.

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:

Most likely routes of exposure are: Inhalation, Ingestion, skin contact. No hazards known for listed routes of exposure.

Potential acute health effects

Eye contact:	No data available.
Inhalation:	No data available.
Skin contact:	No data available.
Ingestion:	No data available.

Symptoms related to the physical, chemical, and toxicological characteristics

Eye contact:	No data available.
Inhalation:	No data available.
Skin contact:	No data available.
Ingestion:	No data available.

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

Short term exposure Potential immediate No data available. effects: Potential delayed effects: No data available. Long term exposure Potential immediate No data available. effects: Potential delayed effects: No data available. Potential chronic health effects General: No data available. No data available. Carcinogenicity: Mutagenicity: No data available.



Reproductive

toxicity:

No data available.

Numerical measures of toxicity

Acute toxicity estimates

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

Section 12. Ecological information

<u>Toxicity</u>	
There is no data available.	
Persistence and degradabili	ity
There is no data available.	
<u>Mobility in soil</u>	
Soil/water partition	
coefficient (K _{oc}):	Not 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 nonrecyclable 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

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

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:	The following components are listed: No listed components
CEPA Toxic	
substances:	None of the components are listed.
International regulation	uns
Chemical Weapon Con	vention 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 Protoco	ol on POPs and Heavy Metals
Not listed.	
Inventory list	
Canada:	All components are listed or exempted.



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Section 16. Other information

<u>History</u>	
Date of issue/Date	
of revision:	08/09/2024
Date of previous	
issue:	12/15/2021
Version:	03
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 Ait Transport Association
	IBC = Intermediate Bulk Container
	IMDG = International Maritime Dangerous Goods
	LogP _{OW} = 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
Non-Hazardous	This substance does not contain hazardous components

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

Lyophilized Trichinella spiralis Primer and Probe Mix

Section 1. Identification

Product Identifier:	Lyophilized <i>Trichinella spiralis</i> Primer and Probe Mix
Product code:	TM72451L
Product Type:	Solid
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: <u>techsupport@norgenbiotek.com</u>
Emergency telephone	CHEMTREC
number (with hours	U.S. & Canada: 1-800-424-9300

Section 2. Hazard Identification

Classification of the Substance or mixture:	Not a Hazardous Mixture.
<u>GHS label elements</u> Hazard Pictograms: Signal Word: Hazard Statements:	No hazard pictogram required. No signal word required. No hazard statement(s) required
Precautionary statements: Prevention: Response:	No precautionary statement(s) required) Not applicable. Not applicable.

of operation):



Section 2. Hazard Identification

Storage: Disposal: Not applicable.

osal: Not applicable.

Section 3. Composition/information on ingredients

Substance/mixture:Mixture.Other means ofNot 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.



Section 4. First-aid measures

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact:	In case of contact with eyes, rinse out with water. Remove contact lenses.
Inhalation:	If inhaled, move patient to fresh air.
Skin contact:	In case of skin contact, rinse skin with water. Remove contaminated clothing.
Ingestion:	In case of ingestion, do not induce vomiting. Drink water. Consult a doctor if
-	feeling unwell.

Over-exposure signs/symptoms

Eye contact:	Possible irritation.
Inhalation:	Possible cough, possible irritation.
Skin contact:	Possible irritation.
Ingestion:	Possible stomach pains.

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

Notes to physician:	Not applicable.
Specific treatments:	No data available.
Protection of	
first-aiders:	No data available.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

<u>Extinguishing media</u> Suitable extinguishin media:	g Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable	
extinguishing media:	For this mixture no limitations of extinguishing agents are given.
Specific hazards	
arising from the	
chemical:	Not combustible. Ambient fire may liberate hazardous vapours.
Hazardous thermal	
decomposition	
products:	None.
Special protective	
actions for	
fire-fighters:	In the event of fire, wear self-contained breathing apparatus.
Special protective	
equipment for	
fire-fighters:	In the event of fire, wear self-contained breathing apparatus.



Section 6. Accidental release measures

Personal precautions, protective equipment, and emergency procedures

For non-emergency	
personnel:	Advice for non-emergency personnel: Do not breathe vapors, aerosols. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.
For emergency	
responders:	Advice for emergency responders: Do not breathe vapors, aerosols. Evacuate the danger area, observe emergency procedures. For personal protection see section 8.
Environmental	
precautions:	No special precautionary measures necessary.
Methods and materia	als for containment and cleaning up
Small spill:	Dilute with water. Wipe up with absorbent pad.
Large spill:	Observe possible material restrictions (see sections 7 and 10). Take up with liquid absorbent material. Dispose of properly. Clean up affected area.

Section 7. Handling and storage

Precautions for safe handlingProtective measures:For precautions see section 2.Advice on generaloccupationalhygiene:Wear appropriate PPE (if any) when handling.Conditions for safestorage, includingincompatibilities:No special storage conditions required. Keep tightly closed.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Contains no substances with occupational exposure limit values.

Appropriate engineering
controls:Not required.Environmental
exposure controls:Not required.

Individual protection measures Hygiene measures: No data available.



Eye/face protection: No data available.

Skin protection	
Hand protection:	Not required.
Body protection:	Not required.
Other skin	
protection:	Not required.
Respiratory	
protection:	Not required.

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:	Solid.
Color:	Colourless.
Odor:	Not available.
Odor threshold:	Not available.
pH:	Not available.
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:	Not applicable.
n-octanol/water	
Auto-ignition	
temperature:	Not available.



Decompositiontemperature:Not available.Viscosity:Not available.Flow timeISO 2431):Not available.Not available.Particle characteristicsMedian 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: Possibility of	The product is stable.
hazardous reactions: Conditions to avoid: Incompatible	Under normal conditions of storage and use, hazardous reactions will not occur. No specific data.
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

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

Irritation/Corrosion

To the best of our knowledge, this mixture is not considered an irritant or corrosive.

Sensitization

There is no data available.

Mutagenicity

There is no data available.

Carcinogenicity

There is no data available.

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:

Most likely routes of exposure are: Inhalation, Ingestion, skin contact. No hazards known for listed routes of exposure.

Potential acute health effects

Eye contact:	No data available.
Inhalation:	No data available.
Skin contact:	No data available.
Ingestion:	No data available.

Symptoms related to the physical, chemical, and toxicological characteristics

Eye contact:	No data available.
Inhalation:	No data available.
Skin contact:	No data available.
Ingestion:	No data available.

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

Short term exposure Potential immediate No data available. effects: Potential delayed effects: No data available. Long term exposure Potential immediate effects: No data available. Potential delayed effects: No data available. Potential chronic health effects General: No data available. No data available. Carcinogenicity: Mutagenicity: No data available.



Reproductive

toxicity:

No data available.

Numerical measures of toxicity

Acute toxicity estimates

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

Section 12. Ecological information

<u>Toxicity</u>	
There is no data available.	
Persistence and degradability	ity
There is no data available.	
<u>Mobility in soil</u>	
Soil/water partition	
coefficient (K _{oc}):	Not available.
Other adverse effects:	No known significant effect or critical hazards.

Section 13. Disposal considerations

Disposal methods:

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

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

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

<u>Canadian lists</u> Canadian NPRI: CEPA Toxic	The following components are listed: No listed components	
substances:	None of the components are listed.	
International regulation	uns de la companya de	
Chemical Weapon Con	vention 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.	

Section 16. Other information

<u>History</u>	
Date of issue/Date	
of revision:	08/09/2024
Date of previous	
issue:	N/A
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 Ait Transport Association	
	IBC = Intermediate Bulk Container
	IMDG = International Maritime Dangerous Goods
	LogPow = logarithm of the octanol/water partition coefficient
	MARPOL = International Convention for the Prevention of Pollution From Ships,
	1973 as modified by the Protocol of 1978 (Marpol = marine pollution)
	SGG = Segregation Group
	UN = United Nations

Procedure used to derive the classification

Clas	sification	Justification
Non	-Hazardous	This mixture does not contain hazardous components

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

Lyophilized MDx TaqMan 2X PCR Master Mix

Section 1. Identification

Product Identifier: Product code: Product Type:	Lyophilized MDx TaqMan 2X PCR Master Mix TMM3200L Solid
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: <u>techsupport@norgenbiotek.com</u>
Emergency telephone	CHEMTREC

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 Hazardous substance.
GHS label elements Hazard Pictograms: Signal Word: Hazard Statements:	No hazard pictogram required. No signal word required. No hazard statement(s) required
Precautionary statements: Prevention: Response:	No precautionary statement(s) required) Not applicable. Not applicable.



Section 2. Hazard Identification

Storage: Disposal: Not applicable.

Not applicable.

Section 3. Composition/information on ingredients

Substance/mixture:Substance.Other means ofNot 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.



Section 4. First-aid measures

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact:	In case of contact with eyes, rinse out with water. Remove contact lenses.
Inhalation:	If inhaled, move patient to fresh air.
Skin contact:	In case of skin contact, rinse skin with water. Remove contaminated clothing.
Ingestion:	In case of ingestion, do not induce vomiting. Drink water. Consult a doctor if
	feeling unwell.

Over-exposure signs/symptoms

Eye contact:	Possible irritation.
Inhalation:	Possible cough, possible irritation.
Skin contact:	Possible irritation.
Ingestion:	Possible stomach pains.

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

Notes to physician:	Not applicable.
Specific treatments:	No data available.
Protection of	
first-aiders:	No data available.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media Suitable extinguishin media:	g Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable	
extinguishing media:	For this substance no limitations of extinguishing agents are given.
Specific hazards	
arising from the	
chemical:	Not combustible. Ambient fire may liberate hazardous vapours.
Hazardous thermal	, , ,
decomposition	
products:	None.
Special protective	
actions for	
fire-fighters:	In the event of fire, wear self-contained breathing apparatus.
Special protective	
equipment for	
fire-fighters:	In the event of fire, wear self-contained breathing apparatus.



Section 6. Accidental release measures

Personal precautions, protective equipment, and emergency procedures

For non-emergency	
personnel:	Advice for non-emergency personnel: Do not breathe vapors, aerosols. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.
For emergency	
responders:	Advice for emergency responders: Do not breathe vapors, aerosols. Evacuate the danger area, observe emergency procedures. For personal protection see section 8.
Environmental	
precautions:	No special precautionary measures necessary.
Methods and materia	als for containment and cleaning up
Small spill:	Dilute with water. Wipe up with absorbent pad.
Large spill:	Observe possible material restrictions (see sections 7 and 10). Take up with liquid absorbent material. Dispose of properly. Clean up affected area.

Section 7. Handling and storage

Precautions for safe handlingProtective measures:For precautions see section 2.Advice on generaloccupationalhygiene:Wear appropriate PPE (if any) when handling.Conditions for safestorage, includingincompatibilities:No special storage conditions required. Keep tightly closed.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Contains no substances with occupational exposure limit values.

Appropriate engineering
controls:Not required.Environmental
exposure controls:Not required.

Individual protection measures Hygiene measures: No data available.



Eye/face protection: No data available.

Skin protection	
Hand protection:	Not required.
Body protection:	Not required.
Other skin	
protection:	Not required.
Respiratory	
protection:	Not required.

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:	Solid.
Color:	Colourless.
Odor:	Not available.
Odor threshold:	Not available.
pH:	Not available.
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:	Not applicable.
n-octanol/water	
Auto-ignition	
temperature:	Not available.



Decompositiontemperature:Not available.Viscosity:Not available.Flow timeISO 2431):Not available.Not available.Particle characteristicsMedian 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: Possibility of	The product is stable.
hazardous reactions: Conditions to avoid: Incompatible	Under normal conditions of storage and use, hazardous reactions will not occur. No specific data.
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

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

Irritation/Corrosion

To the best of our knowledge, this substance is not considered an irritant or corrosive.

Sensitization

There is no data available.

Mutagenicity

There is no data available.

Carcinogenicity

There is no data available.

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:

Most likely routes of exposure are: Inhalation, Ingestion, skin contact. No hazards known for listed routes of exposure.

Potential acute health effects

Eye contact:	No data available.
Inhalation:	No data available.
Skin contact:	No data available.
Ingestion:	No data available.

Symptoms related to the physical, chemical, and toxicological characteristics

Eye contact:	No data available.
Inhalation:	No data available.
Skin contact:	No data available.
Ingestion:	No data available.

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

Short term exposure Potential immediate No data available. effects: Potential delayed effects: No data available. Long term exposure Potential immediate No data available. effects: Potential delayed effects: No data available. Potential chronic health effects General: No data available. No data available. Carcinogenicity: Mutagenicity: No data available.



Reproductive

toxicity:

No data available.

Numerical measures of toxicity

Acute toxicity estimates

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

Section 12. Ecological information

<u>Toxicity</u>	
There is no data available.	
Persistence and degradabili	<u>ity</u>
There is no data available.	
<u>Mobility in soil</u>	
Soil/water partition	
coefficient (K _{oc}):	Not available.
Other adverse effects:	No known significant effect or critical hazards.

Section 13. Disposal considerations

Disposal methods:

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

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

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

<u>Canadian lists</u>	
Canadian NPRI:	The following components are listed: No listed components
CEPA Toxic	
substances:	None of the components are listed.
International regulation	uns
Chemical Weapon Con	vention 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 Protoco	ol on POPs and Heavy Metals
Not listed.	
Inventory list	
Canada:	All components are listed or exempted.



Section 16. Other information

History	

Date of issue/Date	
of revision:	08/09/2024
Date of previous	
issue:	N/A
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 Ait Transport Association
	IBC = Intermediate Bulk Container
	IMDG = International Maritime Dangerous Goods
	LogP _{OW} = 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
Non-Hazardous	This substance does not contain hazardous components

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.

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