

# SAFETY DATA SHEET

## **Binding Buffer C**

## **Section 1. Identification**

**Product Identifier: Binding Buffer C** 

90084, 90085, 90226, T032 **Product code:** 

**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

**Emergency telephone** 

number (with hours

of operation):

U.S. & Canada: 1-800-424-9300

## Section 2. Hazard Identification

Classification of the

**Substance or mixture:** ACUTE ORAL TOXICITY -Category 4

**CHEMTREC** 

ACUTE INHALATION TOXICITY - Category 4 SKIN CORROSIVE/IRRITATION - Category 3

SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 SPECIFIC TARGET ORAGN TOXICITY (SINGLE EXPOSURE) TARGET ORGANS - CENRTAL NERVOUS SYSTEM (CNS)

FLAMMABLE LIQUID -Category 3

#### **GHS** label elements **Hazard Pictograms:**





## **Binding Buffer C**

Signal Word: Warning

**Hazard Statements:** H302 + H332 Harmful if swallowed or if inhaled.

H315 Causes skin irritation.

H319 Causes serious eye irritation. H402 Harmful to aquatic life.\ H226 Flammable liquid or vapour

H336 May cause drowsiness or dizziness

**Precautionary Statements** 

**Prevention:** P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P233 Keep container tightly closed

P240 Ground/Bond container and receiving equipment

P241 Use explosion proof electrical/ventilating/lighting/equipment

P242 Use only non-sparkling tools

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280 Wear protective gloves/ eye protection/ face protection.

**Response:** P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/

doctor if you feel unwell. Rinse mouth.

P302 + P352 IF ON SKIN: Wash with plenty of water.

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if

you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue

rinsing.

P332 + P313 If skin irritation occurs: Get medical advice/ attention. P337 + P313 If eye irritation persists: Get medical advice/ attention. P362 + P364 Take off contaminated clothing and wash it before reuse.

P370+378 In case of fire: Use appropriate media to extinguish

**Storage:** P405 Store locked up.

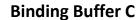
**Disposal:** P501 Dispose of contents and container to an approved waste disposal plant.

# Section 3. Composition/information on ingredients

**Substance/mixture:** Mixture

Other means of identification:

Ingredient name	% (w/w)	CAS number
Guanidine Hydrochloride	10-50	50-10-1
Isopropyl alcohol	30	67-3-0





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.

First - Aid response

**Eye contact:** Rinse immediately with plenty of water, also under the eyelids, for at least 15

minutes. Get medical attention.

**Inhalation:** Remove to fresh air. Get medical attention immediately if symptoms occur. If not

breathing, give artificial respiration

**Skin contact:** Wash off immediately with plenty of water for at least 15 minutes. Get medical

attention immediately if symptoms occur

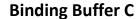
**Ingestion:** Do NOT induce vomiting. Get medical attention.

Over-exposure signs/symptoms

**Eye contact:** Irritation, redness, watering

Inhalation: No data available Skin contact: Irritation, redness

**Ingestion:** Drowsiness, dizziness, stomach pain, gastrointestinal issues





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

**Notes to physician:** Treat symptomatically **Specific treatments:** No specific treatments

**Protection of** 

**first-aiders:** First Aid responders should pay attention to self-protection, and use the

recommended personal protective equipment when the potential for exposure

exists (see section 8).

See toxicological information (Section 11)

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

## **Extinguishing media**

Suitable extinguishing

**media:** Flammable in the presence of a source of ignition when the temperature is above

the flash point. Use water spray, alcohol resistant foam, dry chemical or carbon dioxide. Use appropriate media for adjacent fire. Cool containers with water.

Unsuitable

extinguishing media: None known

Specific hazards arising from the

**chemical:** Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and

in the presence of an ignition source is a potential dust explosion hazard.

Exposure to combustion products may be a hazard to health.

Hazardous thermal decomposition

**products**: Carbon oxides

Nitrogen oxides (NOx) Chlorine compounds

Metal oxide

Special protective

actions for

**fire-fighters:** Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment. Use water spray to cool unopened containers. Remove

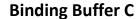
undamaged containers from fire area if it is safe to do so. Evacuate area.

Special protective equipment for

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**fire-fighters:** In the event of fire, wear self-contained breathing apparatus. Use personal

protective equipment.





## Section 6. Accidental release measures

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

For non-emergency

**personnel:** Use personal protective equipment. Follow safe handling advice (see section 7)

and personal protective equipment recommendations (see section 8).

**Environmental** 

**precautions:** Avoid release to the environment. Prevent further leakage or spillage if safe to do

so. Retain and dispose of contaminated wash water

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

Small spill: Stop leak if without risk. Move containers from spill area. Dilute with water and

mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a

licensed waste disposal contractor.

**Large spill:** Stop leak if without risk. Move containers from spill area. Approach release from

upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and

collect spillage with non-combustible, absorbent material e.g. sand, earth,

vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal

contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and

Section 13 for waste disposal.

# Section 7. Handling and storage

#### **Precautions for safe handling**

Protective measures: Work under hood. Do not inhale substance/mixture.

Advice on general occupational

hygiene: Immediately change contaminated clothing. Apply preventive skin protection.

Wash hands and face after working with substance.

**Conditions for safe storage, including** 

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**incompatibilities:** Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Store

in doors.Incompatible Materials. Strong oxidizing agents.





## Section 8. Exposure controls/personal protection

#### **Control parameters**

Occupational exposure limits

Ingredient name	Exposure limits	
Guanidine Hydrochloride Isopropyl alochol	600 ug/m <sup>3</sup> 200ppm	

**Appropriate engineering** 

**controls:** Ensure adequate ventilation, especially in confined areas. Minimize workplace

exposure concentrations. Apply measures to prevent dust explosions. Ensure that

dust-handling systems (such as exhaust ducts, dust collectors, vessels, and

processing equipment) are designed in a manner to prevent the escape of dust into

the work area (i.e., there is no leakage from the equipment)

**Environmental** 

**exposure controls:** No information available

**Individual protection measures** 

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

Eye/face protection: Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or

EuropeanStandardEN166.

**Skin protection** 

**Hand protection:** Wear appropriate protective gloves to prevent contact with skin.

**Body protection:** Wear clothes that appropriately cover exposed areas of the body to avoid contact

with the body

Other skin

**protection:** Not applicable

Respiratory

**protection:** No protective measures under normal conditions while working in a well

ventilated area.

# 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: No t available
Odor: Not available.
Odor threshold: Not available.

**pH:** 4-6

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 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

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**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**

Product/ingredient name	Result	Species	Dose	Exposure
	LD50 Oral	Rat	475 mg/kg	-
Guanidine Hydrochloride	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LC50 Inhalation	Rat	3.2 mg/L	4h

#### Irritation/Corrosion

There is no data available.

#### **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)**

Nerves, Kidneys, Cardiovascular system, Gastrointestinal tract, Liver.

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

Central Nervous System

#### **Aspiration hazard**

There is no data available.

#### Information on the

likely routes of

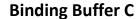
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**exposure:** Oral, dermal, eyes, inhalation

#### Potential acute health effects

**Eye contact:** Irritation, redness, watering

**Inhalation:** Not data available





**Skin contact:** Irritation, redness, rash

**Ingestion:** Gastrointestinal issues, vomiting, pain,

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

Eye contact:Not data availableInhalation:Not data availableSkin contact:Not data availableIngestion:Not data available

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

#### **Short term exposure**

**Potential immediate** 

**effects:** Not data available

Potential delayed

**effects:** Damage to the central nervous system

**Long term exposure Potential immediate** 

effects: Not data available

Potential delayed

**effects:** Damage to the central nervous system

Potential chronic health effects

General: Damage to the central nervous system

Carcinogenicity: Not data available

Mutagenicity: Not data available

Reproductive

toxicity: Not data available

#### **Numerical measures of toxicity**

## **Acute toxicity estimates**

Product/ingredient	Result	Species	Score	Exposure	Observation
name					
	LD50 Oral	Rat	474.6	-	-
Guanidine hydrochloride		Mouse	mg/kg	-	-
	LC50	Rat	571 mg/kg	4h	-
	Inhalation	Rabbit	3.181 mg/l	-	Irritation
	LD50		>2000		
	Dermal		mg/kg		



# Section 12. Ecological information

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
	70.2 mg/l	Daphnia	48h
	33.5 mg/l	Algae	72h
Guanidine Hydrochloride	7125 mg/l	Bacteria	18h
	181 mg/l	Fish (chronic)	35days
	2.9 mg/l	Daphnia (chronic)	21days

#### Persistence and degradability

There is no data available.

**Mobility in soil** 

Soil/water partition

coefficient ( $K_{oc}$ ): Not available.

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

# Section 13. Disposal considerations

#### **Disposal methods:**

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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	<b>DOT Classification</b>	IMGD	IATA
	Classification	(US)		
UN number	UN1219	UN1219	UN1219	UN1219
UN proper	ISOPROPANOL	ISOPROPANOL	ISOPROPANOL	ISOPROPANOL
shipping name				
Transport	3	3	3	3
hazard				
class(es)				
Packing group	II	II	II	II
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:** 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

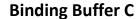
#### **UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed

#### **Inventory list**

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Canada: All components are listed or exempted.





## **Section 16. Other information**

History

Date of issue/Date

**of revision:** 07/18/2024

**Date of previous** 

issue: 12/15/2021

Version: 00

**Prepared by:** Norgen Biotek Corp.

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

BCF = Bio-concentration Factor

GHS = Globally Harmonized System of Classification and Labeling of

Chemicals

HPR = Hazardous Products Regulations

IATA = International Ait Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

 $Log P_{OW} = logarithm of the octanol/water partition coefficient$ 

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

All classifications were determined using calculation methods

#### Notice to reader

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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**

## **Elution Buffer B**

## **Section 1. Identification**

**Product Identifier:** Elution Buffer B

Product code: 90020, 90021, 90022, 90173, 90194, 90231, 90251, 90252, Dx90020, Dx90022,

NBELBUFFB-15ML, NBELBUFFB-30ML, NBELBUFFB-8ML

**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

**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:** 

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**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:** THAM Tris (hydroxymethyl) amino methane, Trisamine, Trimethylol amino methane, Trisaminol, TRIS, 2-Amino-2-(hydroxymethyl)-1,3-propanediol, 1,1,1-Tris(hydroxymethyl)

Methyl amine, Tromethamol

Ingredient name	% (w/w)	CAS number
Trimethylol amino methane	<0.2	77-86-1
Hydrochloric Acid	< 0.02	7647-01-0

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:** Not available

For emergency

responders: Not available

**Environmental** 

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**precautions:** Not available

#### 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

Ingredient name	Exposure limits
Hydrochloric Acid	5ppm/7.5mg/m <sup>3</sup>

#### 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:** 9-11

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 characteristics** 

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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**

Product/ingredient name	Result	Species	Dose	Exposure
	-	-	-	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
_	-	_	_	-	-

#### 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**

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There is no data available.



## **Section 11. Toxicology information**

#### 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

Tel: 1-866-667-4362

**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**

Product/ingredient name	Oral	Dermal	Inhalation	Inhalation	Inhalation
	(mg/kg)	(mg/kg)	(gases)	(vapors)	(dusts and
			(ppm)	(mg/l)	mists) (mg/l)
-	-	-	-	-	-

# Section 12. Ecological information

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
-	-	-	-

#### Persistence and degradability

There is no data available.

Product/ingredient name	LogPow	BCF	Potential
-	-	-	-

#### Mobility in soil

Soil/water partition

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coefficient (K<sub>oc</sub>): 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 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



#### **Elution Buffer B**

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	<b>DOT</b> Classification	IMGD	IATA
	Classification	(US)		
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: Trimethylol amino methane,

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:** 07/11/2024

**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 Ait Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

 $Log P_{OW} = logarithm of the octanol/water partition coefficient$ 

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
Not a dangerous substance or mixture	-

#### Notice to reader

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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.