# SAFETY DATA SHEET



### **DNase I**

### **Section 1. Identification**

Product identifier : DNase I

Other means of identification

1.5

Product code :

Product type : Liquid.

Identified uses :

Supplier/Manufacturer : 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 : EYE IRRITATION - Category 2B

substance or mixture RESPIRATORY SENSITIZATION - Category 1

**GHS** label elements

Hazard pictograms :



Signal word : Danger

**Hazard statements** : H320 - Causes eye irritation.

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Precautionary statements** 

Prevention : P284 - Wear respiratory protection.

P261 - Avoid breathing vapor.

P264 - Wash hands thoroughly after handling.





# Section 2. Hazard identification

Response : P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for

breathing.

P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or

physician.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 - If eye irritation persists: Get medical attention.

**Storage** : Not applicable.

: P501 - Dispose of contents and container in accordance with all local, regional, **Disposal** 

national and international regulations.

Other hazards which do not : None known.

result in classification/ HHNOC/PHNOC

## Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification

### CAS number/other identifiers

**CAS** number : Not applicable.

**Product code** 

Ingredient name	% (w/w)	CAS number
Glycerol	30 - 60	56-81-5
Nuclease, deoxyribo-	0.1 - 1	9003-98-9

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

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

### Section 4. First-aid measures

### **Description of necessary first aid measures**

**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. If irritation persists, get medical attention.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

> If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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 necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or

waistband. In the event of any complaints or symptoms, avoid further exposure.

: Flush contaminated skin with plenty of water. Get medical attention if symptoms Skin contact occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.



### Section 4. First-aid measures

### Ingestion

: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

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

### Potential acute health effects

**Eye contact** : Causes eye irritation.

**Inhalation** : May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin contactIngestionNo known significant effects or critical hazards.No known significant effects or critical hazards.

### Over-exposure signs/symptoms

**Eye contact** : Adverse symptoms may include the following:

pain or irritation

watering redness

**Inhalation** : Adverse symptoms may include the following:

wheezing and breathing difficulties

asthma

Skin contactIngestionNo known significant effects or critical hazards.No known significant effects or critical hazards.

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

Notes to physician : Treat symptomatically. Contact

: Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

**Specific treatments**: No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it

is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person

providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### **Extinguishing media**

Suitable extinguishing

media

: Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing** 

media

: None known.

Specific hazards arising from the chemical

: No specific fire or explosion hazard.





## Section 5. Fire-fighting measures

**Hazardous thermal** decomposition products : Decomposition products may include the following materials: carbon dioxide carbon monoxide

**Special protective actions** for fire-fighters

: No special measures are required.

**Special protective** equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure

### Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** 

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

### Methods and 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** 

: Put on appropriate personal protective equipment (see Section 8). Persons with a history of asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.



## Section 7. Handling and storage

Advice on general occupational hygiene

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

Conditions for safe storage, including any incompatibilities

: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

# Section 8. Exposure controls/personal protection

### **Control parameters**

### Occupational exposure limits

Ingredient name	Exposure limits
Glycerol	CA Alberta Provincial (Canada, 4/2009). 8 hrs OEL: 10 mg/m³ 8 hours. Form: Mist CA British Columbia Provincial (Canada, 5/2015). TWA: 10 mg/m³ 8 hours. Form: Mist TWA: 3 mg/m³ 8 hours. Form: Respirable mist CA Quebec Provincial (Canada, 1/2014). TWAEV: 10 mg/m³ 8 hours. Form: Mist CA Saskatchewan Provincial (Canada, 7/2013). STEL: 20 mg/m³ 15 minutes. Form: Mist TWA: 10 mg/m³ 8 hours. Form: Mist CA Ontario Provincial (Canada, 7/2015). TWA: 10 mg/m³ 8 hours. Form: Mist

# Appropriate engineering controls

: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

# Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

### Individual protection measures

**Hygiene measures** 

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

### **Eye/face protection**

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

### **Skin protection**





## Section 8. Exposure controls/personal protection

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body protection** 

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

# Section 9. Physical and chemical properties

### **Appearance**

**Physical state** : Liquid.

Color : Not available. Odor : Not available. : Not available. **Odor threshold** Ha : Not available. **Melting point** : Not available. **Boiling point** : Not available. Flash point : Not available. **Evaporation rate** : Not available.

Flammability (solid, gas) Lower and upper explosive

(flammable) limits Vapor pressure : Not available. Vapor density : Not available.

**Relative density** : Not available. : Not available. Solubility Partition coefficient: n-

octanol/water

: Not available.

: Not available.

: Not available.

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



## 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**: Not available.

Hazardous decomposition

products

: Under normal conditions of storage and use, hazardous decomposition products

should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

### **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
Glycerol	LD50 Oral	Rat	12600 mg/kg	-

### **Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
Glycerol	Eyes - Mild irritant	Rabbit		24 hours 500 mg	
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-

### **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

: Dermal contact. Eye contact. Inhalation. Ingestion.

### Potential acute health effects

**Eye contact** : Causes eye irritation.





## **Section 11. Toxicological information**

Inhalation : May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin contactIngestionNo known significant effects or critical hazards.No known significant effects or critical hazards.

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

**Eye contact** : Adverse symptoms may include the following:

pain or irritation watering redness

**Inhalation** : Adverse symptoms may include the following:

wheezing and breathing difficulties

asthma

Skin contactIngestionNo known significant effects or critical hazards.No known significant effects or critical hazards.

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

### **Short term exposure**

Potential immediate

effects

: No known significant effects or critical hazards.

Potential delayed effects : No known significant effects or critical hazards.

Long term exposure

Potential immediate

: No known significant effects or critical hazards.

effects

Potential delayed effects : No known significant effects or critical hazards.

### Potential chronic health effects

General : Once sensitized, a severe allergic reaction may occur when subsequently exposed

to very low levels.

Carcinogenicity: No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards.

Developmental effects: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

No known significant effects or critical hazards.

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

### **Acute toxicity estimates**

There is no data available.

## Section 12. Ecological information

### **Toxicity**

There is no data available.

### Persistence and degradability

There is no data available.

### **Bioaccumulative potential**







# Section 12. Ecological information

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Glycerol	-1.76	-	low

Mobility in soil

Soil/water partition coefficient (Koc)

: There is no data available.

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

## Section 13. Disposal considerations

**Disposal methods** 

: The generation of waste should be avoided or 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 disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. 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

	TDG Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Additional information	-	-	-

**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.





## Section 15. Regulatory information

### **Canadian lists**

Canadian NPRI : None of the components are listed.CEPA Toxic substances : None of the components are listed.

Canada inventory : At least one component is not listed in DSL but all such components are listed in

NDSL.

### Section 16. Other information

### Procedure used to derive the classification

Classification	Justification
EYE IRRITATION - Category 2B RESPIRATORY SENSITIZATION - Category 1	Calculation method Calculation method

### **History**

**Date of issue** : 11/15/2016

Version : 1

Prepared by : KMK Regulatory Services Inc.

Key to abbreviations : ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

HPR = Hazardous Products Regulations

### 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



### **Enzyme Incubation Buffer A**

### **Section 1. Identification**

**GHS** product identifier Enzyme Incubation Buffer A

Other means of identification

**Product code** 

**Product type** : Liquid.

**Identified uses** 

Supplier/Manufacturer : 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. Hazards identification

Classification of the substance or mixture : Not classified.

**GHS** label elements

Signal word : No signal word.

**Hazard statements** : No known significant effects or critical hazards.

**Precautionary statements** 

Prevention : Not applicable. Response : Not applicable. **Storage** : Not applicable. **Disposal** : Not applicable. Physical hazards not : None known.

otherwise classified

(PHNOC)

Health hazards not : None known.

otherwise classified

(HHNOC)





# Section 3. Composition/information on ingredients

Substance/mixture

Other means of

identification

### **CAS** number/other identifiers

**CAS** number : Not applicable.

**Product code** 

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section. Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

**Eye contact** : Not applicable. Inhalation : Not applicable. **Skin contact** : Not applicable. Ingestion : Not applicable.

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

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards. Inhalation : No known significant effects or critical hazards. Skin contact : No known significant effects or critical hazards. Ingestion : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

Eye contact : No known significant effects or critical hazards. Inhalation : No known significant effects or critical hazards. **Skin contact** : No known significant effects or critical hazards. Ingestion : No known significant effects or critical hazards.

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

Notes to physician : Treat symptomatically. Specific treatments : No specific treatment.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### **Extinguishing media**

Suitable extinguishing

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing

media

media

: None known.

Specific hazards arising

: No specific fire or explosion hazard.

from the chemical





# Section 5. Fire-fighting measures

Hazardous thermal decomposition products : No specific data.

Special protective actions

for fire-fighters

: No special measures are required.

Special protective

equipment for fire-fighters

: No special protection is required.

### Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

For non-emergency

personnel

: Put on appropriate personal protective equipment.

For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-

emergency personnel".

**Environmental precautions** : No special requirements.

### Methods and materials for containment and cleaning up

Spill

: Dilute with water and mop up if water-soluble or absorb with an inert dry material and

place in an appropriate waste disposal container.

## Section 7. Handling and storage

### Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene

measures.

including any incompatibilities

**Conditions for safe storage**, : Store in accordance with local regulations.

# Section 8. Exposure controls/personal protection

### **Control parameters**

#### **Canada**

### Occupational exposure limits

No exposure limit value known.

Appropriate engineering

controls

: No special measures are required.

**Environmental exposure** 

controls

: No special measures are required.

### Individual protection measures

**Hygiene measures** : Follow good hygiene measure.

: Not required under normal conditions of use. Eye/face protection





## Section 8. Exposure controls/personal protection

**Skin protection** 

**Hand protection** : Not required under normal conditions of use. **Body protection** : Not required under normal conditions of use. Other skin protection : Not required under normal conditions of use. **Respiratory protection** : Not required under normal conditions of use.

## Section 9. Physical and chemical properties

**Appearance** 

**Physical state** : Liquid. [Clear.] Color Colorless. Odor : Odorless. : Not available. Odor threshold pН : Not available. **Melting point** : Not available. : Not available. **Boiling point** : Not applicable. Flash point **Evaporation rate** : Not available. : Not applicable. Flammability (solid, gas) Lower and upper explosive : Not applicable.

(flammable) limits

: Not available. Vapor pressure Vapor density : Not available. **Relative density** : Not available. : Not available. Solubility Partition coefficient: n-: Not available.

octanol/water

: Not applicable. **Auto-ignition temperature Decomposition temperature** : Not available. **Viscosity** : Not available. Volatility : Not available.

: 0 % (w/w) VOC (w/w)

## 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.

: None known. **Incompatible materials** 





## Section 10. Stability and reactivity

Hazardous decomposition products

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

# **Section 11. Toxicological information**

### Information on toxicological effects

### **Acute toxicity**

There is no data available.

### **Irritation/Corrosion**

There is no data available.

### **Sensitization**

There is no data available.

### Carcinogenicity

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

: Dermal contact. Eye contact. Inhalation. Ingestion.

#### Potential acute health effects

Eye contact
 Inhalation
 No known significant effects or critical hazards.
 Skin contact
 No known significant effects or critical hazards.
 Ingestion
 No known significant effects or critical hazards.

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

Eye contact
 Inhalation
 No known significant effects or critical hazards.
 Skin contact
 No known significant effects or critical hazards.
 Ingestion
 No known significant effects or critical hazards.

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

### **Short term exposure**

Potential immediate

effects

: No known significant effects or critical hazards.

Potential delayed effects : No known significant effects or critical hazards.

Long term exposure

Potential immediate : No known significant effects or critical hazards.

effects

**Potential delayed effects**: No known significant effects or critical hazards.

Potential chronic health effects

General : No known significant effects or critical hazards.





## **Section 11. Toxicological information**

Carcinogenicity: No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards.

Developmental effects: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

No known significant effects or critical hazards.

### **Numerical measures of toxicity**

### **Acute toxicity estimates**

There is no data available.

# Section 12. Ecological information

### **Toxicity**

There is no data available.

### Persistence and degradability

There is no data available.

### **Bioaccumulative potential**

There is no data available.

### **Mobility in soil**

Soil/water partition coefficient (Koc)

: There is no data available.

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

## Section 13. Disposal considerations

**Disposal methods** 

: The generation of waste should be avoided or minimized wherever possible. No specific disposal consideration.

# **Section 14. Transport information**

	TDG	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards		No.	No.
Additional information	-	-	-



# **Section 14. Transport information**

**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 : Not available.

to Annex II of MARPOL 73/78 and the IBC Code

## Section 15. Regulatory information

### **Canadian lists**

**Canadian NPRI** : None of the components are listed. **CEPA Toxic substances** : None of the components are listed. **Canada inventory** : All components are listed or exempted.

**International lists National inventory** 

**Australia** : All components are listed or exempted. China : All components are listed or exempted. **Europe** : All components are listed or exempted. : All components are listed or exempted. Japan

Malaysia : Not determined.

**New Zealand** : All components are listed or exempted. **Philippines** : All components are listed or exempted. Republic of Korea : All components are listed or exempted.

**Taiwan** : Not determined.

# Section 16. Other information

### **History**

Date of issue Date of previous issue Version

Prepared by : KMK Regulatory Services Inc.

#### Notice to reader

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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.

