

Section 2. Hazard identification

Disposal	: High Sensitivity D1000 Sample Buffer	Not applicable.
	High Sensitivity D1000 Ladder	Not applicable.
Supplemental label elements	: High Sensitivity D1000 Sample Buffer	None known.
	High Sensitivity D1000 Ladder	None known.
	High Sensitivity D1000 Sample Buffer	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 13.7%
Other hazards which do not result in classification	: High Sensitivity D1000 Sample Buffer	None known.
	High Sensitivity D1000 Ladder	None known.

Section 3. Composition/information on ingredients

Substance/mixture	: High Sensitivity D1000 Sample Buffer	Mixture
	High Sensitivity D1000 Ladder	Mixture

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Section 4. First-aid measures

Description of necessary first aid measures

Eye contact	: High Sensitivity D1000 Sample Buffer	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	High Sensitivity D1000 Ladder	
Inhalation	: High Sensitivity D1000 Sample Buffer	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	High Sensitivity D1000 Ladder	
Skin contact	: High Sensitivity D1000 Sample Buffer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	High Sensitivity D1000 Ladder	
Ingestion	: High Sensitivity D1000 Sample Buffer	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	High Sensitivity D1000 Ladder	

Section 4. First-aid measures

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact	: High Sensitivity D1000 Sample Buffer	No known significant effects or critical hazards.
	High Sensitivity D1000 Ladder	No known significant effects or critical hazards.
Inhalation	: High Sensitivity D1000 Sample Buffer	No known significant effects or critical hazards.
	High Sensitivity D1000 Ladder	No known significant effects or critical hazards.
Skin contact	: High Sensitivity D1000 Sample Buffer	No known significant effects or critical hazards.
	High Sensitivity D1000 Ladder	No known significant effects or critical hazards.
Ingestion	: High Sensitivity D1000 Sample Buffer	No known significant effects or critical hazards.
	High Sensitivity D1000 Ladder	No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	: High Sensitivity D1000 Sample Buffer	No specific data.
	High Sensitivity D1000 Ladder	No specific data.
Inhalation	: High Sensitivity D1000 Sample Buffer	No specific data.
	High Sensitivity D1000 Ladder	No specific data.
Skin contact	: High Sensitivity D1000 Sample Buffer	No specific data.
	High Sensitivity D1000 Ladder	No specific data.
Ingestion	: High Sensitivity D1000 Sample Buffer	No specific data.
	High Sensitivity D1000 Ladder	No specific data.

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

Notes to physician	: High Sensitivity D1000 Sample Buffer	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	High Sensitivity D1000 Ladder	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: High Sensitivity D1000 Sample Buffer	No specific treatment.
	High Sensitivity D1000 Ladder	No specific treatment.
Protection of first-aiders	: High Sensitivity D1000 Sample Buffer	No action shall be taken involving any personal risk or without suitable training.
	High Sensitivity D1000 Ladder	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 media	: High Sensitivity D1000 Sample Buffer High Sensitivity D1000 Ladder	Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: High Sensitivity D1000 Sample Buffer High Sensitivity D1000 Ladder	None known. None known.
Specific hazards arising from the chemical	: High Sensitivity D1000 Sample Buffer High Sensitivity D1000 Ladder	In a fire or if heated, a pressure increase will occur and the container may burst. In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	: High Sensitivity D1000 Sample Buffer High Sensitivity D1000 Ladder	Decomposition products may include the following materials: carbon dioxide carbon monoxide No specific data.
Special protective actions for fire-fighters	: High Sensitivity D1000 Sample Buffer High Sensitivity D1000 Ladder	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	: High Sensitivity D1000 Sample Buffer High Sensitivity D1000 Ladder	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	: High Sensitivity D1000 Sample Buffer High Sensitivity D1000 Ladder	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
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Section 6. Accidental release measures

For emergency responders : High Sensitivity D1000
Sample Buffer

High Sensitivity D1000
Ladder

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".
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 : High Sensitivity D1000
Sample Buffer

High Sensitivity D1000
Ladder

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).

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

Methods for cleaning up : High Sensitivity D1000
Sample Buffer

High Sensitivity D1000
Ladder

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.

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.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : High Sensitivity D1000
Sample Buffer
High Sensitivity D1000
Ladder

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

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

Advice on general occupational hygiene : High Sensitivity D1000
Sample Buffer

High Sensitivity D1000
Ladder

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

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

Section 7. Handling and storage

<p>Conditions for safe storage, including any incompatibilities</p>	<p>: High Sensitivity D1000 Sample Buffer</p> <p>High Sensitivity D1000 Ladder</p>	<p>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. See Section 10 for incompatible materials before handling or use.</p> <p>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. See Section 10 for incompatible materials before handling or use.</p>
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Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Biological exposure indices

No exposure indices known.

<p>Appropriate engineering controls</p>	<p>: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.</p>
<p>Environmental exposure controls</p>	<p>: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.</p>

Individual protection measures

<p>Hygiene measures</p>	<p>: 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.</p>
<p>Eye/face protection</p>	<p>: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.</p>
<p>Skin protection</p>	<p>: 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.</p>

Section 8. Exposure controls/personal protection

- 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 and safety characteristics

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

Appearance

Physical state	: High Sensitivity D1000	Liquid.
	Sample Buffer	
	High Sensitivity D1000	Liquid.
Color	Ladder	
	: High Sensitivity D1000	Colorless.
	Sample Buffer	
Odor	High Sensitivity D1000	Colorless.
	Ladder	
	: High Sensitivity D1000	Odorless.
Odor threshold	Sample Buffer	
	High Sensitivity D1000	Odorless.
	Ladder	
Odor threshold	: High Sensitivity D1000	Not available.
	Sample Buffer	
	High Sensitivity D1000	Not available.
pH	Ladder	
	: High Sensitivity D1000	8
	Sample Buffer	
Melting point/freezing point	High Sensitivity D1000	8
	Ladder	
	: High Sensitivity D1000	Not available.
Boiling point, initial boiling point, and boiling range	Sample Buffer	
	High Sensitivity D1000	0°C (32°F)
	Ladder	
Boiling point, initial boiling point, and boiling range	: High Sensitivity D1000	~189°C (372°F)
	Sample Buffer	
	High Sensitivity D1000	100°C (212°F)
Flash point	Ladder	
	: High Sensitivity D1000	Not available.
	Sample Buffer	
Flash point	High Sensitivity D1000	Not available.
	Ladder	
	: High Sensitivity D1000	Not available.
Evaporation rate	Sample Buffer	
	High Sensitivity D1000	Not available.
	Ladder	
Flammability	: High Sensitivity D1000	Not applicable.
	Sample Buffer	
	High Sensitivity D1000	Not applicable.
Ladder		

Section 9. Physical and chemical properties and safety characteristics

Lower and upper explosion limit/flammability limit : High Sensitivity D1000 Sample Buffer Not available.
High Sensitivity D1000 Ladder Not available.

Vapor pressure :

Ingredient name	Vapor Pressure at 20°C			Vapor pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
High Sensitivity D1000 Sample Buffer						
water	17.5	2.3	-	92.258	12.3	-
High Sensitivity D1000 Ladder						
water	17.5	2.3	-	92.258	12.3	-

Relative vapor density : High Sensitivity D1000 Sample Buffer Not available.
High Sensitivity D1000 Ladder Not available.

Relative density : High Sensitivity D1000 Sample Buffer Not available.
High Sensitivity D1000 Ladder Not available.

Solubility(ies) :

Media	Result
High Sensitivity D1000 Sample Buffer	
water	Soluble
High Sensitivity D1000 Ladder	
water	Soluble

Partition coefficient: n-octanol/water : High Sensitivity D1000 Sample Buffer Not applicable.
High Sensitivity D1000 Ladder Not applicable.

Auto-ignition temperature : Not available.

Decomposition temperature : High Sensitivity D1000 Sample Buffer Not available.
High Sensitivity D1000 Ladder Not available.

Viscosity : High Sensitivity D1000 Sample Buffer Not available.
High Sensitivity D1000 Ladder Not available.

Particle characteristics

Median particle size : High Sensitivity D1000 Sample Buffer Not applicable.
High Sensitivity D1000 Ladder Not applicable.

Section 10. Stability and reactivity

Reactivity	: High Sensitivity D1000 Sample Buffer High Sensitivity D1000 Ladder	No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: High Sensitivity D1000 Sample Buffer High Sensitivity D1000 Ladder	The product is stable. The product is stable.
Possibility of hazardous reactions	: High Sensitivity D1000 Sample Buffer High Sensitivity D1000 Ladder	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: High Sensitivity D1000 Sample Buffer High Sensitivity D1000 Ladder	No specific data. No specific data.
Incompatible materials	: High Sensitivity D1000 Sample Buffer High Sensitivity D1000 Ladder	May react or be incompatible with oxidizing materials. May react or be incompatible with oxidizing materials.
Hazardous decomposition products	: High Sensitivity D1000 Sample Buffer High Sensitivity D1000 Ladder	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Irritation/Corrosion

Not available.

Sensitization

Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Not available.

Section 11. Toxicological information

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : High Sensitivity D1000 Not available.
 Sample Buffer
 High Sensitivity D1000 Not available.
 Ladder

Potential acute health effects

Eye contact : High Sensitivity D1000 No known significant effects or critical hazards.
 Sample Buffer
 High Sensitivity D1000 No known significant effects or critical hazards.
 Ladder

Inhalation : High Sensitivity D1000 No known significant effects or critical hazards.
 Sample Buffer
 High Sensitivity D1000 No known significant effects or critical hazards.
 Ladder

Skin contact : High Sensitivity D1000 No known significant effects or critical hazards.
 Sample Buffer
 High Sensitivity D1000 No known significant effects or critical hazards.
 Ladder

Ingestion : High Sensitivity D1000 No known significant effects or critical hazards.
 Sample Buffer
 High Sensitivity D1000 No known significant effects or critical hazards.
 Ladder

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : High Sensitivity D1000 No specific data.
 Sample Buffer
 High Sensitivity D1000 No specific data.
 Ladder

Inhalation : High Sensitivity D1000 No specific data.
 Sample Buffer
 High Sensitivity D1000 No specific data.
 Ladder

Skin contact : High Sensitivity D1000 No specific data.
 Sample Buffer
 High Sensitivity D1000 No specific data.
 Ladder

Ingestion : High Sensitivity D1000 No specific data.
 Sample Buffer
 High Sensitivity D1000 No specific data.
 Ladder

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

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Section 11. Toxicological information

Potential delayed effects : Not available.

Potential chronic health effects

General	: High Sensitivity D1000 Sample Buffer High Sensitivity D1000 Ladder	No known significant effects or critical hazards. No known significant effects or critical hazards.
Carcinogenicity	: High Sensitivity D1000 Sample Buffer High Sensitivity D1000 Ladder	No known significant effects or critical hazards. No known significant effects or critical hazards.
Mutagenicity	: High Sensitivity D1000 Sample Buffer High Sensitivity D1000 Ladder	No known significant effects or critical hazards. No known significant effects or critical hazards.
Reproductive toxicity	: High Sensitivity D1000 Sample Buffer High Sensitivity D1000 Ladder	No known significant effects or critical hazards. No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

N/A

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not 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 at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. 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. Empty containers or liners may retain

Section 13. Disposal considerations

some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

TDG / IMDG / IATA : Not regulated.

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

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

Canadian lists

Canadian NPRI : None of the components are listed.

CEPA Toxic substances : None of the components are listed.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Canada : Not determined.

United States : Not determined.

Section 16. Other information

History

Date of issue/Date of revision : 08/12/2024

Date of previous issue : 06/30/2023

Version : 8

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
HPR = Hazardous Products Regulations
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
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)

Section 16. Other information

N/A = Not available

UN = United Nations

Procedure used to derive the classification

Classification	Justification
Not classified.	

✔ Indicates information that has changed from previously issued version.

Notice to reader

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