



Safety Data Sheet

Canada

Section 1. Identification

Product name Reagent B; part of 'DNA Extraction Kit BACC3'

Catalogue Number RPN8512



9 0 R P N 8 5 1 2

Chemical name Reagent B

Product type Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Identified uses

Use in laboratories

Supplier Cytiva
Amersham Place
Little Chalfont
Buckinghamshire
HP7 9NA United Kingdom
+44 1494 508000

Importer Cytiva Canada
1055 Vernon Dr
Vancouver BC V6A 3P4
Canada
+1 778-956-2584

In case of emergency

INFOTRAC

Outside of the United States, call 24 Hour number: 001-352-323-3500 (Call Collect)

In the United States, call 24 Hour number: 1-800-535-5053

Section 2. Hazard identification

Classification of the substance or mixture EYE IRRITATION - Category 2A

GHS label elements

Hazard pictograms



Signal word

Warning

Hazard statements

Causes serious eye irritation.

Precautionary statements

Prevention

Wear eye or face protection. Wash thoroughly after handling.

Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

Storage

Not applicable.

Disposal

Not applicable.



9 5 2 5 0 0 6 7 2 2 3

Section 3. Composition/information on ingredients

Substance/mixture	Mixture
Chemical name	Reagent B
Other means of identification	Not available.

Ingredient name	Synonyms	% (w/w)	CAS number
Ethylenediaminetetraacetic acid	(EDTA); Glycine, N,N'-1,2-ethanediybis[N-(carboxymethyl)-; Ethylenediaminetetraacetic acid; Ethylenedinitrilo, tetraacetic acid; EDTA; ethylenediaminetetra(acetic acid); 2,2',2'', 2'''-(ethane-1,2-diylidinitrilo)tetraacetic acid; Acetic acid, (ethylenedinitrilo)tetra-; ETHYLENEDIAMINE-TETRAACETIC ACID; Havidote; (Ethylenedinitrilo)-tetraacetic acid	≥1 - ≤5	CAS: 60-00-4
Sodium lauryl sulfate	Sulfuric acid monododecyl ester sodium salt (1:1); Sulfuric acid monododecyl ester sodium salt; Sulfuric acid, monododecyl ester, sodium salt; Dodecyl hydrogen sulfate; Sodium dodecyl sulfate; SODIUM LAURYL SULFATE; Dodecyl sodium sulphate; ethylcellulose, in the form of an aqueous dispersion containing hexadecan-1-ol (CAS RN 36653-82-4) and sodium dodecyl sulphate (CAS RN 151-21-3), containing by weight 27 (± 3) % of ethylcellulose; SODIUM MONODODECYL SULFATE; SODIUM LAURYL SULFATE, DENTAL GRADE; SODIUM LAURYL SULFATE 30%	≥1 - ≤5	CAS: 151-21-3
2-amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	1,3-Propanediol, 2-amino-2-(hydroxymethyl)-, hydrochloride (1:1); 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-, hydrochloride; 2-Amino-2-hydroxymethyl-1,3-propanediol hydrochloride; Tris(hydroxymethyl)aminomethane, hydrochloride; 2-amino-2-(hydroxymethyl)propane-1,3-diol; trometamol monohydrochloride; tromethamine hydrochloride; tris-Hydrochloride; 2-Amino-2-(hydroxymethyl)propane-1,3-diol monohydrochloride; Tris(hydroxymethyl)aminomethane hydrochloride; PROPANE-1,3-DIOL, 2-AMINO-2-(HYDROXYMETHYL)-, HYDROCHLORIDE	≥1 - ≤5	CAS: 1185-53-1

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 10 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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Skin contact	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. 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 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.
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Most important symptoms/effects, acute and delayed**Potential acute health effects**

Eye contact	Causes serious eye irritation.
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	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	No specific data.
Skin contact	No specific data.
Ingestion	No specific data.

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

Notes to physician	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	No specific treatment.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training. 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	In a fire or if heated, a pressure increase will occur and the container may burst.
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Hazardous thermal decomposition products	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides halogenated compounds metal oxide/oxides
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Special protective actions for fire-fighters	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.
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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 mode.
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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. Evacuate surrounding areas. 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. Absorb with an inert 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. 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.

Section 7. Handling and storage

Precautions for safe handling

Protective measures	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. 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.
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. Remove contaminated clothing and protective equipment before entering eating areas. 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. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Biological exposure indices

No exposure indices known.

Appropriate engineering controls	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Environmental exposure controls	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.

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.
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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	
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 and safety characteristics

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

Appearance

Physical state	Liquid.
Color	Colorless.
Odor	Odorless.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Boiling point or initial boiling point and boiling range	Not available.
Flash point	Not applicable.
Burning time	Not applicable.
Burning rate	Not applicable.
Evaporation rate	Not available.
Flammability	Not available.
Lower and upper explosive (flammable) limits	Not available.
Vapor pressure	Not available.

Vapor Pressure at 20°C

Vapor pressure at 50°C

	Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
	water	17.5	2.3				
	edetic acid	0	0				
Relative vapor density	Not available.						
Relative density	Not available.						

Solubility(ies)

Media	Result
cold water	Easily soluble
hot water	Easily soluble

Solubility in water Not available.

Partition coefficient: n-octanol/ water Not available.

Auto-ignition temperature Not available.

Ingredient name	°C	°F	Method
sodium dodecyl sulphate	310.5	590.9	VDI 2263
edetic acid	>400	>752	VDI 2263

Decomposition temperature Not available.

SADT Not available.

Viscosity Not available.

Flow time (ISO 2431) Not available.

Particle characteristics



Median particle size	Not applicable.
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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	No specific data.
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

Sodium lauryl sulfate

Result

Rat - Oral - LD50
1288 mg/kg

Conclusion/Summary
[Product]

Not available.

Skin corrosion/irritation

Product/ingredient name

Sodium lauryl sulfate

Result

Human - Skin - Mild irritant
Duration of treatment/exposure: 48 hours
Amount/concentration applied: 5 %
Human - Skin - Severe irritant
Duration of treatment/exposure: 24 hours
Amount/concentration applied: 10 %
Guinea pig - Skin - Mild irritant
Duration of treatment/exposure: 336 hours
Amount/concentration applied: 25250 ppm
Guinea pig - Skin - Mild irritant
Duration of treatment/exposure: 24 hours
Amount/concentration applied: 25250 ppm
Guinea pig - Skin - Severe irritant
Duration of treatment/exposure: 48 hours
Amount/concentration applied: 25250 ppm
Guinea pig - Skin - Severe irritant
Duration of treatment/exposure: 72 hours
Amount/concentration applied: 25250 ppm
Human - Skin - Mild irritant
Duration of treatment/exposure: 24 hours
Amount/concentration applied: 0.5 %
Human - Skin - Moderate irritant
Duration of treatment/exposure: 24 hours
Amount/concentration applied: 10 pph
Man - Skin - Mild irritant
Duration of treatment/exposure: 24 hours
Amount/concentration applied: 5 %
Mouse - Skin - Moderate irritant
Duration of treatment/exposure: 24 hours
Amount/concentration applied: 5 %
Rabbit - Skin - Moderate irritant
Duration of treatment/exposure: 24 hours
Amount/concentration applied: 5 %
Rabbit - Skin - Severe irritant
Duration of treatment/exposure: 24 hours
Amount/concentration applied: 2.5 %
Mouse - Skin - Severe irritant
Duration of treatment/exposure: 4 hours
Amount/concentration applied: 1 pph
Rabbit - Skin - Mild irritant
Duration of treatment/exposure: 1 hours
Amount/concentration applied: 5 %



Conclusion/Summary
[Product] Not available.

Serious eye damage/eye irritation

Product/ingredient name

Sodium lauryl sulfate

Result

Rabbit - Eyes - Mild irritant

Duration of treatment/exposure: 1 hours

Amount/concentration applied: 5 pph

Rabbit - Eyes - Severe irritant

Duration of treatment/exposure: 1 hours

Amount/concentration applied: 1 %

Rabbit - Eyes - Severe irritant

Duration of treatment/exposure: 1 hours

Amount/concentration applied: 1 %

Conclusion/Summary
[Product] Not available.

Respiratory corrosion/irritation

Not available.

Conclusion/Summary
[Product] Not available.

Respiratory or skin sensitization

Not available.

Skin

Conclusion/Summary
[Product] Not available.

Respiratory

Conclusion/Summary
[Product] Not available.

Germ cell mutagenicity

Not available.

Conclusion/Summary
[Product] Not available.

Carcinogenicity

Not available.

Conclusion/Summary
[Product] Not available.

Reproductive toxicity

Not available.

Conclusion/Summary
[Product] Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.



Aspiration hazard

Not available.

Information on the likely routes of exposure Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact Causes serious eye irritation.
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 Adverse symptoms may include the following:
 pain or irritation
 watering
 redness
Inhalation No specific data.
Skin contact No specific data.
Ingestion No specific data.

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.
Potential delayed effects Not available.

Potential chronic health effects

Not available.

Conclusion/Summary [Product] Not available.
General No known significant effects or critical hazards.
Carcinogenicity No known significant effects or critical hazards.
Mutagenicity No known significant effects or critical hazards.
Reproductive toxicity No known significant effects or critical hazards.

Numerical measures of toxicity**Acute toxicity estimates**

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Reagent B	27932.7	N/A	N/A	N/A	N/A
Sodium lauryl sulfate	1288	N/A	N/A	N/A	N/A

Section 12. Ecological information**Toxicity**

Product/ingredient name	Result
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Ethylenediaminetetraacetic acid	Acute - LC50 - Fresh water		
	Fish - Bluegill - <i>Lepomis macrochirus</i> <u>Size</u> : 34 mm; <u>Weight</u> : 0.74 g 41 mg/l [96 hours] <u>Effect</u> : Mortality		
Sodium lauryl sulfate	Acute - EC50 - Fresh water		
	Daphnia - Water flea - <i>Daphnia magna</i> - Neonate <u>Age</u> : <24 hours 113 mg/l [48 hours] <u>Effect</u> : Intoxication		
	Acute - LC50 - Fresh water		
	Fish - Carp, hawk fish - <i>Cirrhinus mrigala</i> - Larvae <u>Age</u> : 2 days; <u>Size</u> : 4.5 mm; <u>Weight</u> : 51 mg 590 µg/l [96 hours] <u>Effect</u> : Mortality		
	Acute - EC50 - Marine water		
	Algae - Diatom - <i>Skeletonema costatum</i> 1200 µg/l [96 hours] <u>Effect</u> : Population		
	Acute - LC50 - Marine water		
	Crustaceans - Brine shrimp - <i>Artemia salina</i> - Adult <u>Age</u> : 25 days; <u>Size</u> : 3.5 to 4.5 mm 900 µg/l [48 hours] <u>Effect</u> : Mortality		
	Chronic - NOEC - Marine water		
	Algae - Sea Lettuce - <i>Ulva fasciata</i> - Zoea 1.25 mg/l [96 hours] <u>Effect</u> : Reproduction		
	Chronic - NOEC - Fresh water		
	OECD Crustaceans - Water flea - <i>Pseudosida ramosa</i> - Neonate <u>Age</u> : <24 hours 1 mg/l [21 days] <u>Effect</u> : Reproduction		
	Chronic - NOEC - Fresh water		
	OECD Fish - Eastern mosquitofish - <i>Gambusia holbrooki</i> <u>Weight</u> : 0.14 g 0.8 mg/l [28 days] <u>Effect</u> : Enzymes		
2-amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	EC50 Daphnia >100 mg/l [48 hours]		

Conclusion/Summary Not available.
[Product]

Persistence and degradability

Not available.

Conclusion/Summary Not available.
[Product]

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Sodium lauryl sulfate	-	>60%; 28 day(s)	Readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Ethylenediaminetetraacetic acid	-3.34	1.8	Low
Sodium lauryl sulfate	-2.03	-	Low

Mobility in soil

Soil/Water partition coefficient 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. Care should be taken when handling emptied 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	DOT Classification	ADR/RID	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-
Packing group	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.
Additional information	-	-	-	-	-

Special precautions for user

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

Transport in bulk according to IMO instruments

Not available.

Section 15. Regulatory information

Canadian lists

Canadian NPRI None of the components are listed.

CEPA Toxic substances None of the components are listed.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Canada All components are listed or exempted.

United States All components are listed or exempted.



Section 16. Other information

History


Date of printing 2/20/2026
Date of issue/Date of revision 2/20/2026
Date of previous issue 7/23/2025
Version 10.02
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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)
N/A = Not available
UN = United Nations

Procedure used to derive the classification

Classification	Justification
EYE IRRITATION - Category 2A	Calculation method

References Not available.

 Indicates information that has changed from previously issued version.

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.

