SAFETY DATA SHEET

New Zealand

Section 1. Identification

Product name

Reagent B; part of 'DNA Extraction Kit BACC3'

Catalogue Number

RPN8512

Chemical name Reagent B

Other means of identification Not available.

Product type Liquid.

Identified uses

Use in laboratories

Supplier

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

Cytiva New Zealand
Buddle Findlay, Level 18, Pricewaterhousecooper Tower,
188 Quay Street,
Auckland, Auckland, 1010
New Zealand

Person who prepared the SDS :

sds_author@cytiva.com

Emergency telephone number (with hours of operation)

0800 733 893
(10am - 7pm)

Section 2. Hazards identification

HSNO Classification

6.3 - SKIN IRRITATION - Category B
6.4 - EYE IRRITATION - Category A (Irritant)

Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 5%

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 5%

This material is classified as hazardous according to criteria in the Hazardous Substances (Hazard Classification) Notice 2020.

GHS label elements

Signal word Warning

Hazard statements

Causes mild skin irritation.
Causes serious eye irritation.

Precautionary statements

Prevention Wear eye or face protection.

Response If skin irritation occurs: Get medical advice/attention. 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/attention. Wash hands after handling.

Storage Not applicable.

Disposal Not applicable.

Symbol

Other hazards which do not result in classification None known.

Section 3. Composition/information on ingredients

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

Ingredient name	% (w/w)	Identifiers
Edetic acid	<5	CAS: 60-00-4 EC: 200-449-4
Dodecyl sodium sulphate	<5	CAS: 151-21-3 EC: 205-788-1
2-amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	<5	CAS: 1185-53-1 EC: 214-684-5

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

Inhalation	If inhaled, remove to fresh air. Get medical attention if symptoms appear.
Ingestion	Do not ingest. Get medical attention if symptoms appear.
Skin contact	Wash with soap and water. Get medical attention if irritation develops.
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.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Inhalation	Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Ingestion	Irritating to mouth, throat and stomach.
Skin contact	Causes mild skin irritation.
Eye contact	Causes serious eye irritation.

Over-exposure signs/symptoms

Inhalation	No specific data.
Ingestion	No specific data.
Skin	Adverse symptoms may include the following: irritation redness
Eyes	Adverse symptoms may include the following: pain or irritation watering redness

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

Specific treatments	Not available.
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.
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. Firefighting measures

Extinguishing media

Suitable	Use an extinguishing agent suitable for the surrounding fire.
Not suitable	None known.
Specific hazards arising from the chemical	In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides halogenated compounds metal oxide/oxides
Hazchem code	Not available.
Special precautions 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.
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.

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 spilt material. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	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 spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
Environmental precautions	Avoid dispersal of spilt 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 material 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 the 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 spilt 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). 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. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour 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 unlabelled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Biological exposure indices

No exposure indices known.

Appropriate engineering controls	No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure 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. 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.
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	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.
Respiratory protection	A respirator is not needed under normal and intended conditions of product 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.
Colour	Colourless.
Odour	Odourless.
Odour 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.
Vapour pressure	Not available.

	Vapour Pressure at 20˚C			Vapour pressure at 50˚C		
Ingredient name	**mm Hg**	**kPa**	**Method**	**mm Hg**	**kPa**	**Method**
water	17.5	2.3				
edetic acid	0	0				

Relative vapour 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.

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 likely routes of exposure

Inhalation	Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Ingestion	Irritating to mouth, throat and stomach.
Skin contact	Causes mild skin irritation.
Eye contact	Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics

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

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

Acute toxicity

Product/ingredient name	Result
Dodecyl sodium sulphate	**Rat - Oral - LD50** 1288 mg/kg

Conclusion/Summary[Product] Not available.

Skin corrosion/irritation

Product/ingredient name	Result
Dodecyl sodium sulphate	**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	Result
Dodecyl sodium sulphate	**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.

Potential chronic health effects

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

Chronic toxicity

Not available.

Conclusion/Summary[Product] Not available.

Carcinogenicity

Not available.

Conclusion/Summary[Product] Not available.

Germ cell mutagenicity

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.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
Reagent B	1288.0	300	N/A	N/A	N/A
Dodecyl sodium sulphate	1288	300	N/A	N/A	N/A

Section 12. Ecological information

Ecotoxicity No known significant effects or critical hazards.

Aquatic and terrestrial toxicity

Product/ingredient name	Result
Edetic acid	**Acute - LC50 - Fresh water** Fish - Bluegill - *Lepomis macrochirus* Size: 34 mm; Weight: 0.74 g 41 mg/l [96 hours] Effect: Mortality **Acute - EC50 - Fresh water** Daphnia - Water flea - *Daphnia magna* - Neonate Age: <24 hours 113 mg/l [48 hours] Effect: Intoxication
Dodecyl sodium sulphate	**Acute - LC50 - Fresh water** Fish - Carp, hawk fish - *Cirrhinus mrigala* - Larvae Age: 2 days; Size: 4.5 mm; Weight: 51 mg 590 µg/l [96 hours] Effect: Mortality **Acute - EC50 - Marine water** Algae - Diatom - *Skeletonema costatum* 1200 µg/l [96 hours] Effect: Population **Acute - LC50 - Marine water** Crustaceans - Brine shrimp - *Artemia salina* - Adult Age: 25 days; Size: 3.5 to 4.5 mm 900 µg/l [48 hours] Effect: Mortality **Chronic - NOEC - Marine water**

	Algae - Sea Lettuce - *Ulva fasciata* - Zoea 1.25 mg/l [96 hours] Effect: Reproduction **Chronic - NOEC - Fresh water** OECD Crustaceans - Water flea - *Pseudosida ramosa* - Neonate Age: <24 hours 1 mg/l [21 days] Effect: Reproduction **Chronic - NOEC - Fresh water** OECD Fish - Eastern mosquitofish - *Gambusia holbrooki* Weight: 0.14 g 0.8 mg/l [28 days] Effect: Enzymes
2-amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	**EC50** Daphnia >100 mg/l [48 hours]

Conclusion/Summary[Product] Not available.

Persistence/degradability

Not available.

Conclusion/Summary[Product] Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Dodecyl sodium sulphate	-	>60%; 28 day(s)	Readily

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
edetic acid	-3.34	1.8	Low
sodium dodecyl sulphate	-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 minimised 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 spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*
New Zealand Class	Not regulated.	-	-	-
		No.		
IATA Class	Not regulated.	-	-	-
		-		
		No.		
IMDG Class	Not regulated.	-	-	-
		No.		

PG* : Packing group

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

HSNO Approval Number	HSR002596
HSNO Group Standard	Laboratory Chemicals and Reagent Kits
HSNO Classification	6.3 - SKIN IRRITATION - Category B 6.4 - EYE IRRITATION - Category A (Irritant)

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

New Zealand	All components are listed or exempted.
Australia	All components are listed or exempted.
United States	All components are listed or exempted.
Canada inventory	All components are listed or exempted.
China	All components are listed or exempted.
Japan	All components are listed or exempted.

Section 16. Other information

History

Date of printing	20 February 2026
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Date of previous issue	7/23/2025
Version	10.02
Key to abbreviations	ADG = Australian Dangerous Goods ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road 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) RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail UN = United Nations
References	Not available.

Indicates information that has changed from previously issued version.

Notice to reader

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