SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION

1.1 Product Identifier:

Product No: KIT-9240-96
Product Name: PrimeMag Blood DNA Extraction Kit

Other means of identification:
See section 3 or
A registration number for the substance(s) does not exist because the annual tonnage does not require registration or the substance or its use is excluded from registration.

1x 30 mL PLB Lysis Buffer
1x 15 mL BD2 Buffer
2x 40 mL WBA Buffer
1x 12.5 mL Elution Buffer
1x 50 mg Proteinase K
1x 2.5 mL Proteinase K buffer
3x 1.2 mL PrimeMag Beads A

1.2 Recommended use of the chemical and restrictions on use:
To extract genomic DNA from plant tissues.
For R&D use only. Not for pharmaceutical, household, or other uses.

1.3 Supplier Information:

Axil Scientific Pte Ltd
2 Tukang Innovation Grove
06-01 JTC MedTech Hub
Singapore 618305

Tel: +65 6775 7318

Email: custcare@axilscientific.com

Apical Scientific Sdn Bhd
No. 17, Jalan BS7/1C
Taman Perindustrian Bukit Serdang
43300 Seri Kembangan
Selangor Darul Ehsan, Malaysia
Tel: +603 8943 3252
Fax: +603 8943 3243
Email: custcare@apicalscientific.com

1.4 Emergency phone number:
Monday – Friday, **(UTC +8:00)** 8:00 a.m. to 6:00 p.m.
+65 6775 7318 (Singapore)
+603 8943 3252 (Malaysia & Other Countries)

SECTION 2 – HAZARDS IDENTIFICATION

2.0 GHS Classification of Complete Product

Signal Word: Warning

Hazard Identification	Hazard Classification; Hazard Statement
H302	Acute Tox. 4 oral; Harmful if swallowed.
H315	Skin Irritation. 2; Causes skin irritation.
H319	Eye Irritation. 2A; Causes serious eye irritation.
H335	May causes respiratory irritation.
H411	Aquatic Chronic Category 2

2.1 GHS Classification of the Substance or Mixture

1x 30 mL PLB Lysis Buffer

Signal word: Warning

Hazard Identification	Hazard Classification; Hazard Statement
H302	Acute Tox. 4 oral; Harmful if swallowed.
H315	Skin Irritation. 2; Causes skin irritation.
H319	Eye Irritation. 2A; Causes serious eye irritation.
H335	May causes respiratory irritation.
H411	Aquatic Chronic Category 2

1x 15 mL BD2 Buffer

Signal word: Warning

Hazard Identification	Hazard Classification; Hazard Statement
H302	Acute Tox. 4 oral; Harmful if swallowed.
H332	Acute Tox. 4: Harmful if inhaled
H319	Eye Irritation. 2; Causes serious eye irritation
H412	Aquatic Chronic Category 3

2x 40 mL WBA Buffer

Do not need labelling as hazardous

Signal word: -

No hazard class

1x 12.5 mL Elution Buffer

Do not need labelling as hazardous

Signal word: -

No hazard class

1x 50mg Proteinase K

Signal word	DANGER
Hazard Identification	**Hazard Classification; Hazard Statement**
H315	Skin Irrit. 2; Causes skin irritation.
H319	Eye Irrit. 2; Causes serious eye irritation.
H334	Resp. Sens. 1; May cause allergic or asthma symptoms or breathing difficulties if inhaled.
H335	Acute Tox. 3; May cause respiratory irritation.

1 x 2.5 mL Proteinase K Buffer

Signal word	DANGER
Hazard Identification	**Hazard Classification; Hazard Statement**
H315	Skin Irrit. 2; Causes skin irritation.
H319	Eye Irrit. 2; Causes serious eye irritation.
H334	Resp. Sens. 1; May cause allergic or asthma symptoms or breathing difficulties if inhaled.
H335	Acute Tox. 3; May cause respiratory irritation.

3x 1.2 mL PrimeMag Beads A

Do not need labelling as hazardous

Signal word -

No hazard class

2.2 Label Elements, including precautionary statements

30 mL PLB Lysis Buffer

Signal word: WARNING

15 mL BD2 Buffer

Signal word: WARNING

2x 40 mL WBA Buffer

Do not need labelling as hazardous.
Signal word: -

12.5 mL Elution Buffer

Do not need labelling as hazardous.
Signal word: -

50 mg Proteinase K

Signal word: DANGER

2.5 mL Proteinase K Buffer

Signal word: DANGER

3x 1.2 mL PrimeMag Beads A

Do not need labelling as hazardous.
Signal word: -

Precautionary statement(s):
Prevention
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink, or smoke when using this product.
P273 Avoid release to the environment.
P280 Wear protective gloves/ eye protection/ face protection.

Response
P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P304 + P340 IF INHALED: Remove person to fresh air and keep them comfortable for breathing.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reusing.

2.3 Other hazards

Possible hazards from physicochemical properties
In the case of pH values are less than 5 or higher than 9 then it is irritant.

Information pertaining to risks to human and possible symptoms
This mixture has not been tested to determine the overall health hazard.

Information pertaining to risks to the environment
No data available.

Other hazards:
No additional data available.

SECTION 3 – COMPOSITION/ INFORMATION ON INGREDIENTS THAT CONTRIBUTING TO HAZARD

3.1 Substances or 3.2 Mixtures

30 mL PLB Lysis Buffer

Chemical:	Cation surfactant (trade secret)
GHS Classification:	Acute Tox. 4; Skin Irrit. 2; Eye Dam. 1; Aquatic Acute 1
Concentration:	1 to < 5%

15 mL BD2 Buffer

Chemical:	Chaotropic salt (trade secret)
GHS Classification:	H Acute Tox. 4; Eye Irrit. 2; STOT SE 3
Concentration:	50 to < 65%

2x 40 mL WBA Buffer

Chemical:	Ammonium Acetate	CAS No.: 631-61-8
GHS Classification:	-	
Concentration:	< 40%	

12.5 mL Elution Buffer
No component or ingredient is contributing to hazard.

50 mg Proteinase K

Chemical:	Proteinase K	CAS No.: 39450-01-6
GHS Classification:	H315, Skin Irrit. 2; H319, Eye Irrit. 2; H334, Resp. Sens. 1; H335, Acute Tox. 3	
Formula:	3.4.21.64, origin: *Tritirachium album*	
Pseudonym:	Endopeptidase K Protease K	
EC No.:	254-457-8	
Concentration:	95 - <100 %	
acc. CLP (GHS):	H315, Skin Irrit. 2; H319, Eye Irrit. 2; H334, Resp. Sens. 1; H335, Acute Tox. 3	

2.5 mL Proteinase K Buffer

Chemical:	Glycerol	CAS No.: 56-81-5
GHS Classification:	H315, Skin Irrit. 2; H319, Eye Irrit. 2; H334, Resp. Sens. 1; H335, Acute Tox. 3	
EC No.:	200-289-5	
acc. CLP (GHS):	H315, Skin Irrit. 2; H319, Eye Irrit. 2; H334, Resp. Sens. 1; H335, Acute Tox. 3	

3x 1.2 mL PrimeMag Beads A
No component or ingredient is contributing to hazard.

3.3 Remarks
Components of mixture that are not listed are not hazardous to health or the environment within the meaning of GHS, and/or are present below their cut-off levels.

SECTION 4 – FIRST-AID MEASURES

4.1 Description of first aid measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.

Eye Contact
Rinse cautiously with plenty of water. Remove contact lenses. Continue rinsing for at least 15 minutes and consult a physician.

Skin Contact
Rinse skin with soap and plenty of water. Remove contaminated clothing/ shoes and consult a physician.

Inhalation
Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.

Ingestion
Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.3) and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed
No data available.

SECTION 5 – FIRE-FIGHTING MEASURES

5.1 Extinguishing Media
Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special Exposure Hazards
Carbon oxides, Nitrogen oxides (NOx)

5.3 Special Fire-fighting Procedures
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

5.4 Further Information
The product itself does not burn.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment, and emergency procedures
Regular staff training is necessary, indicating hazards and precautions about the basis of operating instructions. Restrictions on activity must be observed. Wear protective gloves, protective clothing, and eye/face protection. Observe general safety guidelines for protection; avoid eye and skin contact.

6.2 Environmental precautions
Contain spills to prevent migration. Do not allow the undiluted product to enter sewers/surface or ground water. Dispose of contents/container in accordance with local regulations.

6.3 Methods and material for containment and cleaning up
Bind any escape liquid with inert absorbent. And dispose chemicals or excess reagents in accordance with local regulations for hazardous chemicals. Clean any contaminated equipment and floors with plenty of water. Collect small amounts of leaked liquid and flush with water into drains.

6.4 Reference to other sections
Nil.

SECTION 7 – HANDLING AND STORAGE

7.1 Precautions for safe handling
Handling in accordance with the test instructions that comes with the product. Use only in well-ventilated working areas.

7.2 Conditions for safe storage, including any incompatibility.
The original product package allows safe storage. To maintain product quality, store according to the instructions in the product labelling.

7.2.1 Requirements for stock rooms and containers
Keep original product packages tightly closed during handling and storage.

7.3 Specific end use(s)
Product for research use.

SECTION 8 – EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1 Control parameters

30 mL PLB Lysis Buffer
This component is not known to contain any substances with occupational exposure limit values.

15 mL BD2 Buffer
This component is not known to contain any substances with occupational exposure limit values.
DNEL: [inh] 1092 µg/m³
DNEL = Derived No-Effect Level (for workers)

PNEC (fresh water): 42.4 µg/L
PNEC = Predicted No Effected Concentration

2x 40 mL WBA Buffer

This component is not known to contain any substances with occupational exposure limit values.

12.5 mL Elution Buffer

This component is not known to contain any substances with occupational exposure limit values.

50 mg Proteinase K

This component is not known to contain any substances with occupational exposure limit values.

2.5 mL Proteinase K Buffer

Chemical: Glycerol CAS No.: 56-81-5

DNEL : Not listed
$PNEC_{(fresh\ water)}$: Not listed
NIOSH : Not listed
OSHA PEL : 15 mg/m^3 [total dust]
5 mg/m^3 [respirable fraction]

3x 1.2 mL PrimeMag Beads A

This component is not known to contain any substances with occupational exposure limit values.

8.2 Exposure controls

Good ventilation and extraction system in the room, floor resistance to chemicals with floor drainage and washing facilities. High level of cleanliness shall be maintained at the workplace.

8.2.1 Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dust is desired, use typeN95 (US) or type P1 (EN 143) dust masks.

8.2.2 Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves must satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

8.2.3 Eye/ face protection

Use safety glasses. Where contact with the eyes is likely, use chemical safety goggles.

8.2.4 Skin protection

Recommended to avoid contamination with these hazards.

8.2.5 Personal hygiene

Eating, drinking, smoking, taking snuff and storage of food in work areas and at outdoor workplaces is prohibited. Avoid contact with the skin, eyes and clothing. Rinse any clothing on which the substance has been spilled and soak it in water. Wash hands thoroughly with soap and water when stopping work and before eating and then apply protective skin cream.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

30 mL PLB Lysis Buffer

Appearance: Liquid	Colour: Colourless	Odour: Odourless
pH: No data available	Relative density: 1.07 g/mL at 20°C	

15 mL BD2 Buffer

Appearance: Liquid	Colour: Colourless	Odour: Odourless
pH: 8.4 – 9.0 (Neat, 25 °C)	Specific gravity: No data available	

2x 40 mL WBA Buffer

Appearance: Liquid	Colour: Colourless	Odour: Odourless
pH: 5.0 – 5.4 (Neat, 25 °C)	Specific gravity: No data available	

12.5 mL Elution Buffer

Appearance: Liquid	Colour: Colourless	Odour: Odourless
pH: No data available	Relative density: No data available	

50 mg Proteinase K

Appearance: Fine powder	Colour: White	Odour: No data available
pH: No data available	Specific gravity: No data available	

2.5 mL Proteinase K Buffer

Appearance: Liquid	Colour: Colourless	Odour: No data available
pH: No data available	Specific gravity: No data available	

3x 1.2 mL PrimeMag Beads A

Appearance: Liquid	Colour: Light brown	Oduor: Odourless
pH: No data available	Specific gravity: No data available	

9.2 Other information

Data for the other parameters of the mixtures are not available, because no registration and no chemical safety report is required.

9.3 Relevant Properties of Substance Group

No data available.

SECTION 10 – STABILITY AND REACTIVITY

10.1 Reactivity

Data is not available.

10.2 Chemical stability

Store according to the recommended temperature on the container label.

10.3 Possibility of hazardous reactions

Hazardous reactions have not been reported.

10.4 Conditions to avoid

Strong heat, direct sunlight, strong oxidizers and strong reducers.

10.5 Incompatible materials

Avoid contact with strong acids or alkaline.

10.6 Hazardous decomposition products

In the original package, all parts/ all reagents are safely and separately stored. Decompositions are not observed during the expiration period under recommended conditions.

SECTION 11 – TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Mixture:

Acute toxicity

30 mL PLB Lysis Buffer
Harmful if swallowed.

15 mL BD2 Buffer
Harmful if swallowed.

2x 40 mL WBA Buffer
Harmful if swallowed.

12.5 mL Elution Buffer
Harmful if swallowed.

3x 1.2 mL PrimeMag Beads A
Harmful if swallowed.

Skin corrosion/irritation

30 mL PLB Lysis Buffer
Mixture may cause skin irritation and/or dermatitis.

15 mL BD2 Buffer
Mixture may cause skin irritation and/or dermatitis.

2x 40 mL WBA Buffer
Mixture may cause skin irritation and/or dermatitis.

12.5 mL Elution Buffer
Mixture may cause skin irritation and/or dermatitis.

3x 1.2 mL PrimeMag Beads A
Mixture may cause skin irritation and/or dermatitis.

Serious eye damage/eye irritation

30 mL PLB Lysis Buffer
Mixture may cause serious eye irritation.

15 mL BD2 Buffer
Mixture may cause serious eye irritation.

2x 40 mL WBA Buffer
Mixture may cause serious eye irritation.

12.5 mL Elution Buffer
Mixture may cause serious eye irritation.

3x 1.2 mL PrimeMag Beads A
Mixture may cause serious eye irritation.

Respiratory or skin sensitization

50 mg Proteinase K
Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

Germ cell mutagenicity: No data available

Carcinogenicity: No data available

Reproductive toxicity: No data available

Specific target organ toxicity: May cause respiratory irritation.

Specific target organ toxicity - repeated exposure: No data available

Aspiration hazard: No data available

11.2 Additional Information

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Other dangerous properties cannot be excluded.
Handle in accordance with good industrial hygiene and safety practice.

Component:
Glycerol

Acute toxicity:
LD50 Oral – Rat/mouse – 12600 mg/kg
LD50 Dermal – Rabbit – 2000 mg/kg
LC50 Inhalation – Rat/mouse – 570 mg/m^3

Skin corrosion/irritation
No data available

Serious eye damage/eye irritation
No data available

Respiratory or skin sensitization
No data available

Germ cell mutagenicity
No data available

Carcinogenicity
No data available

Reproductive toxicity
No data available

Specific target organ toxicity – single exposure
No data available

Specific target organ toxicity – repeated exposure
No data available

Aspiration hazard
No data available

SECTION 12 – ECOLOGICAL INFORMATION

12.1 Toxicity
Data for the mixtures is not available.

12.2 Persistence and degradability
Not necessary.

12.3 Bioaccumulative potential
Not necessary.

12.4 Mobility in soil
Not necessary.

12.5 Other adverse effects
No additional data available.

SECTION 13 – DISPOSAL CONSIDERATIONS

13.1 Product: Offer surplus and non-recyclable solutions to a licensed disposal company.

13.2 Contaminated packaging: Dispose-off as unused product.

SECTION 14 – TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

14.1 UN Number
ADR/RID: - IMDG: - IATA-DGR: -

14.2 UN Proper Shipping Name:
ADR/RID: Not dangerous goods
IMDG: Not dangerous goods
IATA-DGR: Not dangerous goods

14.3 Transport Hazard Class(es)
ADR/RID: - IMDG: - IATA-DGR: -

14.4 Packing Group
ADR/RID: - IMDG: - IATA-DGR: -

14.5 Environmental Hazards
ADR/RID: no IMDG: marine pollutant: no IATA-DGR: no

14.6 Special Precaution for Users
Data is not available.

SECTION 15 – REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture
Data is not available.

SECTION 16 – OTHER INFORMATION

Date of Issue: 01 September 2026 **Date of Revision:** 01 September 2026

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product regarding appropriate safety precautions. We shall not be held liable for any damage resulting from handling or from contact with the above product and shall not establish a legally valid contractual relationship.