

SECTION 1 – IDENTIFICATION

1.1 Product Identifier:

Product No: KIT-9230-48
Product Name: PrimeMag Plant Genomic 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 45 mL Plant Lysis Buffer
1x 3 mL PG Buffer
1x 7.5 mL BD2 Buffer
1x 16 mL WB1 Buffer
1x 6 mL Elution Buffer
1x 10 mg/mL RNase A
1x 1.8 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

H302
H315
H319
H335
H411

Hazard Classification; Hazard Statement

Acute Tox. 4 oral; Harmful if swallowed.
Skin Irritation. 2; Causes skin irritation.
Eye Irritation. 2A; Causes serious eye irritation.
May causes respiratory irritation.
Aquatic Chronic Category 2

2.1 GHS Classification of the Substance or Mixture

1x 45 mL Plant Lysis Buffer



Signal word

Warning

Hazard Identification

H302
H315
H319
H335
H411

Hazard Classification; Hazard Statement

Acute Tox. 4 oral; Harmful if swallowed.
Skin Irritation. 2; Causes skin irritation.
Eye Irritation. 2A; Causes serious eye irritation.
May causes respiratory irritation.
Aquatic Chronic Category 2

1x 3 mL PG Buffer



Signal word

Warning

Hazard Identification

H302
H332
H319
H412

Hazard Classification; Hazard Statement

Acute Tox. 4 oral; Harmful if swallowed.
Acute Tox. 4: Harmful if inhaled
Eye Irritation. 2; Causes serious eye irritation
Aquatic Chronic Category 3

1x 7.5 mL BD2 Buffer



Signal word

Warning

Hazard Identification

H302
H332
H319
H412

Hazard Classification; Hazard Statement

Acute Tox. 4 oral; Harmful if swallowed.
Acute Tox. 4: Harmful if inhaled
Eye Irritation. 2; Causes serious eye irritation
Aquatic Chronic Category 3

1x 16 mL WB1 Buffer

Do not need labelling as hazardous

Signal word

-

No hazard class

1x 6 mL Elution Buffer

Do not need labelling as hazardous

Signal word

-

No hazard class

1x 600 µL RNase A

Do not need labelling as hazardous

Signal word

-

No hazard class

1x 1.8 mL PrimeMag Beads A

Do not need labelling as hazardous

Signal word

-

No hazard class

2.2 Label Elements, including precautionary statements

45 mL Plant Lysis Buffer



Signal word: WARNING

3 mL PG Buffer



Signal word: WARNING

7.5 mL BD2 Buffer



Signal word: WARNING

16 mL WB1 Buffer

Do not need labelling as hazardous.

Signal word: -

6 mL Elution Buffer

Do not need labelling as hazardous.
Signal word: -

600 µL RNase A

Do not need labelling as hazardous.
Signal word: -

1.8 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

45 mL Plant 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%

3 mL PG Buffer

Chemical:	Chaotropic salt (trade secret)
GHS Classification:	Acute Tox. 4; Eye Irrit. 2; STOT SE 3
Concentration:	5 to < 10%

7.5 mL BD2 Buffer

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

16 mL WB1 Buffer

No component or ingredient is contributing to hazard.

6 mL Elution Buffer

No component or ingredient is contributing to hazard.

600 µL RNase A

No component or ingredient is contributing to hazard.

1.8 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 (NO_x)
- 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

45 mL Plant Lysis Buffer

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

3 mL PG 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 Effect Concentration

7.5 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 Effect Concentration

16 mL WB1 Buffer

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

6 mL Elution Buffer

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

600 µL RNase A

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

Singapore OEL (PEL) = 10 mg/m³

Malaysia OEL (TWA) = 10 mg/m³

1.8 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 type N95 (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

45 mL Plant Lysis Buffer

Appearance: liquid
pH: No data available

Colour: Colourless
Relative density: 1.07 g/mL at 20°C

Odour: Odourless

3 mL PG Buffer

Appearance: liquid
pH: 8.4 – 9.0 (Neat, 25 °C)

Colour: Colourless
Specific gravity: No data available

Odour: Odourless

7.5 mL BD2 Buffer

Appearance: liquid
pH: 8.4 – 9.0 (Neat, 25 °C)

Colour: Colourless
Specific gravity: No data available

Odour: Odourless

16 mL WB1 Buffer

Appearance: liquid
pH: 5.0 – 5.4 (Neat, 25 °C)

Colour: Colourless
Specific gravity: No data available

Odour: Odourless

6 mL Elution Buffer

Appearance: liquid
pH: No data available

Colour: Colourless
Relative density: No data available

Odour: Odourless

600 µL RNase A

Appearance: liquid
pH: No data available

Colour: Colourless
Specific gravity: No data available

Odour: Odourless

1.8 mL PrimeMag Beads A

Appearance: liquid
pH: No data available

Colour: Light brown
Specific gravity: No data available

Odour: Odourless

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:

Plant Lysis Buffer

Acute toxicity

Symptoms: Irritations of mucous membranes in the mouth, pharynx, esophagus and gastrointestinal tract.

Possible symptoms: Mucosal irritations

Skin corrosion/irritation

Mixture causes skin irritation.

Serious eye damage/eye irritation

Mixture causes serious eye irritation.

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

Acute oral toxicity - Irritations of mucous membranes in the mouth, pharynx, esophagus and gastrointestinal tract.

Acute inhalation toxicity - Possible symptoms: mucosal irritations

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.

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: 30 Jan 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.