

**SECTION 1 – IDENTIFICATION**

**1.1 Product Identifier:**

Product No: KIT-9030-50  
Product Name: PrimeWay Plant DNA Extraction Kit, 50 preps

**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.

1 x 25 mL PLB1 Buffer  
1 x 20 mL PLB2 Buffer  
1 x 10 mL PPB3 Buffer  
1 x 30 mL PPC Buffer  
1 x 30 mL Wash Buffer P1  
1 x 25 mL Wash Buffer P2  
1 x 13 mL Elution Buffer  
1 x 6 mg RNase A

**1.2 Recommended use of the chemical and restrictions on use:**

To isolate high quality genomic DNA from plant samples.  
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](mailto:custcare@axilscientific.com)

**Apical Scientific Sdn Bhd**  
No 7-1 to 7-4, Jalan SP 2/7  
Taman Serdang Perdana, Seksyen 2  
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Tel: +603 8943 3252

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Email: [custcare@apicalscientific.com](mailto: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

Danger

**Hazard Identification**

H226  
H302  
H319  
H336

**Hazard Classification; Hazard Statement**

Flam. Liq. 3; Flammable liquid and vapour  
Acute Tox. 4 oral; Harmful if swallowed  
Eye Irrit. 2; Causes serious eye irritation  
STOT SE 3; May cause drowsiness or dizziness

## 2.1 GHS Classification of the Substance or Mixture

### 25 mL PLB1 Buffer

Do not need labelling as hazardous

Signal word -

No Hazard Class

### 20 mL PLB2 Buffer

Do not need labelling as hazardous

Signal word -

No Hazard Class

### 10 mL PPB3 Buffer

Do not need labelling as hazardous

Signal word -

No Hazard Class

### 30 mL PPC Buffer



Signal word Warning

**Hazard Identification**

H226

H302

**Hazard Classification; Hazard Statement**

Flam. Liq. 3; Flammable liquid and vapor

Acute Tox. 4 oral; Harmful if swallowed

### 30 mL Wash Buffer P1



Signal word Warning

**Hazard Identification**

H226

H302

H319

H336

**Hazard Classification; Hazard Statement**

Flam. Liq. 3; Flammable liquid and vapour

Acute Tox. 4 oral; Harmful if swallowed

Eye Irrit. 2; Causes serious eye irritation

STOT SE 3; May cause drowsiness or dizziness

### 25 mL Wash Buffer P2

Do not need labelling as hazardous

Signal word -

No Hazard Class

## 13 mL Elution Buffer

Do not need labelling as hazardous

Signal word -

No Hazard Class

## 6 mg RNase A

Do not need labelling as hazardous

Signal word -

No Hazard Class

## 2.2 Label Elements, including precautionary statements

### 25 mL PLB1 Buffer

Do not need labelling as hazardous.

Signal word: -

### 20 mL PLB2 Buffer

Do not need labelling as hazardous.

Signal word: -

### 10 mL PPB3 Buffer

Do not need labelling as hazardous.

Signal word: -

### 30 mL PPC Buffer



Signal word: WARNING

### 30 mL Wash Buffer P1



Signal word: WARNING

### 25 mL Wash Buffer P2

Do not need labelling as hazardous.

Signal word: -

### 13 mL Elution Buffer

Do not need labelling as hazardous.

Signal word: -

**6 mg RNase A**

Do not need labelling as hazardous.

Signal word: -

**Precautionary statement(s):**

**Prevention**

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P260D Do not breathe vapors.

P261sh Avoid breathing dust/vapors.

P264W Wash with water thoroughly after handling.

P280sh Wear protective gloves/eye protection.

**Response**

P301+312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P304+340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P330 Rinse mouth.

P342+311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

**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. Flammable properties.

**Information pertaining to particular risks to human and possible symptoms**

Cause after oral intake, impairments of health when ingested in small quantities. Kit contains small amounts of enzymes, which may cause sensitization by direct and repeated contact.

**Information pertaining to particular 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**

**25 mL PLB1 Buffer**

No component or ingredient is contributing to hazard.

**20 mL PLB2 Buffer**

Chemical: dodecyl sulfate, sodium salt CAS No.: 151-21-3

GHS Classification: H228, Flam. Sol. 1, H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H318, Eye Dam. 1, H332, Acute Tox. 4 inh., H335, STOT SE 3, H412, Aquatic Chronic 3

Formula: C<sub>12</sub> H<sub>25</sub> NaO<sub>4</sub> S

Pseudonym: sodium lauryl sulfate, sulfuric acid monododecyl ester sodium salt

EC No.: 205-788-1

Concentration: 1 to <2.5 %

acc. CLP (GHS): The criteria for classification are not fulfilled.

**10 mL PPB3 Buffer**

No component or ingredient is contributing to hazard.

**30 mL PPC Buffer**

Chemical: guanidine hydrochloride CAS No.: 50-01-1

GHS Classification: H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H319, Eye Irrit. 2

Formula: CH<sub>6</sub> CIN<sub>3</sub>

Pseudonym: guanidinium chloride

EC No.: 200-002-3  
Concentration: 24 to <36 %  
acc. CLP (GHS): H302, Acute Tox. 4 oral

Chemical: ethanol CAS No.: 64-17-5  
(denatured with 1%IPA/1%MEK, acc.2016/1867/EU)  
GHS Classification: H225, Flam. Liq. 2  
Formula: C<sub>2</sub> H<sub>6</sub> O; C<sub>2</sub> H<sub>5</sub> OH  
Pseudonym: ethyl alcohol, methylated spirit  
EC No.: 200-578-6  
Concentration: 35 to <55 %  
acc. CLP (GHS): H226, Flam. Liq. 3

### 30 mL Wash Buffer P1

Chemical: guanidine hydrochloride CAS No.: 50-01-1  
GHS Classification: H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H319, Eye Irrit. 2  
Formula: CH<sub>6</sub> CIN<sub>3</sub>  
Pseudonym: guanidinium chloride  
EC No.: 200-002-3  
Concentration: 36 to <50 %  
acc. CLP (GHS): H302, Acute Tox. 4 oral, H319, Eye Irrit. 2

Chemical: 2-propanol CAS No.: 67-63-0  
GHS Classification: H225, Flam. Liq. 2, H319, Eye Irrit. 2, H336, STOT SE 3  
Formula: C<sub>3</sub> H<sub>8</sub> O  
Pseudonym: isopropanol, IPA, propan-2-ol, isopropyl alcohol  
EC No.: 200-661-7  
Concentration: 20 to <35 %  
acc. CLP (GHS): H226, Flam. Liq. 3, H319, Eye Irrit. 2, H336, STOT SE 3

### 25 mL Wash Buffer P2

No component or ingredient is contributing to hazard.

### 13 mL Elution Buffer

No component or ingredient is contributing to hazard.

### 6 mg RNase 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**

WARNING: Flammable. May form explosive vapor-air mixtures. Formation of hazardous and caustic vapor-air mixtures possible.

### **5.3 Special Fire-fighting Procedures**

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Product package burns like paper or plastic.

### **5.4 Further Information**

No data available.

## **SECTION 6 – ACCIDENTAL RELEASE MEASURES**

### **6.1 Personal precautions, protective equipment, and emergency procedures**

Do not breathe vapors. 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 spill 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 escaping liquid with inert absorbent. And dispose chemicals or excess reagents in accordance to 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**

No data available.

## SECTION 7 – HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Handling in accordance with the test instruction, that comes with the product. Use only in well-ventilated working areas.

### 7.2 Conditions for safe storage, including any incompatibilities.

The original product package allows a 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

#### 25 mL PLB1 Buffer

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

#### 20 mL PLB2 Buffer

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

#### 10 mL PPB3 Buffer

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

#### 30 mL PPC Buffer

Chemical: ethanol

CAS No.: 64-17-5

Singapore OEL (PEL) = 1000 ppm / 1880 mg/m<sup>3</sup>

Malaysia OEL (TWA) = 1000 ppm / 1880 mg/m<sup>3</sup>

#### 30 mL Wash Buffer P1

Chemical: 2-propanol

CAS No.: 67-63-0

Singapore OEL (PEL) = 400 ppm / 983 mg/m<sup>3</sup>

Singapore OEL (STEL) = 500 ppm / 1230 mg/m<sup>3</sup>

Malaysia OEL (TWA) = 400 ppm / 983 mg/m<sup>3</sup>

#### 25 mL Wash Buffer P2

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

#### 13 mL Elution Buffer

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

#### 6 mg RNase 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 resistant 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 dusts 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**

**25 mL PLB1 Buffer**

Appearance: Liquid	Colour: Colourless	Odour: Odourless
pH: 7.5 - 8.5 (Neat, 25 °C)	Specific gravity: 1.06 g/cm <sup>3</sup>	

**20 mL PLB2 Buffer**

Appearance: Liquid	Colour: Colourless	Odour: Odourless
pH: 7.5 - 8.5 (Neat, 25 °C)	Specific gravity: 1.03 g/cm <sup>3</sup>	

**10 mL PPB3 Buffer**

Appearance: Liquid	Colour: Colourless	Odour: Acetic
pH: 5 – 6 (Neat, 25 °C)	Specific gravity: 1.19 g/cm <sup>3</sup>	

**30 mL PPC Buffer**

Appearance: Liquid	Colour: Yellow	Odour: Alcoholic
pH: 5 – 7 (Neat, 25 °C)	Specific gravity: 1.01 g/cm <sup>3</sup>	

**30 mL Wash Buffer P1**

Appearance: Liquid	Colour: Colourless	Odour: Alcoholic
pH: 7 – 8 (Neat, 25 °C)	Specific gravity: 1.06 g/cm <sup>3</sup>	

**25 mL Wash Buffer P2**

Appearance: Liquid	Colour: Colourless	Odour: Odourless
pH: 7 – 8 (Neat, 25 °C)	Specific gravity: 1.00 g/cm <sup>3</sup>	

**13 mL Elution Buffer**

Appearance: Liquid	Colour: Colourless	Odour: Odourless
pH: 8 – 9 (Neat, 25 °C)	Specific gravity: 1.00 g/cm <sup>3</sup>	

**6 mg RNase A**

Appearance: Fine powder	Colour: White	Odour: 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 not available.

### 10.2 Chemical stability

Store according to the recommended temperature on the container label.

### 10.3 Possibility of hazardous reactions

Can form very reactive substances with oxidizing agents. No further data available.

### 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

Quantitative data on the toxicity of this product are not available.

## SECTION 12 – ECOLOGICAL INFORMATION

### 12.1 Toxicity

Data for the mixtures are 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:** Normally it is possible to empty small amounts after dilution into drains.

## SECTION 14 – TRANSPORT INFORMATION

UN/NA 1993 Class 3 III, Excepted Quantities ( $\leq 30$  mL /  $\Sigma \leq 1$  L) = ADR/ IATA E1  
or

**14.1 UN Number**

ADR/RID: 1993

IMDG: 1993

IATA-DGR: 1993

**14.2 UN Proper Shipping Name:**

ADR/RID: Flammable liquid, n.o.s. (2-propanol mixture)

IMDG: Flammable liquid, n.o.s. (2-propanol mixture)

IATA-DGR: Flammable liquid, n.o.s. (2-propanol mixture)

**14.3 Transport Hazard Class(es)**

ADR/RID: 3

IMDG: 3

IATA-DGR: 3

**14.4 Packing Group**

ADR/RID: III

IMDG: III

IATA-DGR: III

**14.5 Environmental Hazards**

ADR/RID: no

IMDG: marine pollutant: no

IATA-DGR: no

Contains only small quantities of hazardous substances.

## SECTION 15 – REGULATORY INFORMATION

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

Not necessary for these small amounts.

## SECTION 16 – OTHER INFORMATION

**Date of Issue:** July 16, 2021

**Date of Revision:** August 17, 2021

*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 with regard to 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.*