

## SECTION 1 – IDENTIFICATION

### 1.1 Product Identifier:

Product No: KIT-9010-50  
Product Name: Viral DNA/RNA 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 21 mL VNA Lysis Buffer  
1 x 4 mL BS Buffer (Concentrated)  
1 x 21 mL WBA Buffer  
1 x 8 mL WBB Buffer (Concentrated)  
1 x 1 mg Inert Carrier [Poly-A] powder  
3 x 1.5 mL RNase-free Water*

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

Viral nucleic acid extraction from serum, plasma, body fluids, cell cultured supernatant and viral transport medium swabs.

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

Warning

#### Hazard Identification

H302  
H315  
H319  
H335

#### Hazard Classification; Hazard Statement

Acute Tox. 4 oral, Harmful if swallowed  
Skin Irrit. 2, Causes skin irritation  
Eye Irrit. 2, Causes serious eye irritation  
STOT SE 3, May cause respiratory irritation

## 2.1 GHS Classification of the Substance or Mixture

### 21 mL VNA Lysis Buffer



Signal word

Warning

**Hazard Identification**

H302  
H315  
H319  
H335

**Hazard Classification; Hazard Statement**

Acute Tox. 4 oral, Harmful if swallowed  
Skin Irrit. 2, Causes skin irritation  
Eye Irrit. 2, Causes serious eye irritation  
STOT SE 3, May cause respiratory irritation

### 4 mL BS Buffer (Concentrated)



Signal word

Warning

**Hazard Identification**

H302  
H315  
H319  
H335

**Hazard Classification; Hazard Statement**

Acute Tox. 4 oral, Harmful if swallowed  
Skin Irrit. 2, Causes skin irritation  
Eye Irrit. 2, Causes serious eye irritation  
STOT SE 3, May cause respiratory irritation

### 21 mL WBA Buffer



Signal word

Warning

**Hazard Identification**

H302  
H315  
H319

**Hazard Classification; Hazard Statement**

Acute Tox. 4 oral, Harmful if swallowed  
Skin Irrit. 2, Causes skin irritation  
Eye Irrit. 2, Causes serious eye irritation

### 8 mL WBB Buffer (Concentrated)



Signal word

Warning

**Hazard Identification**

H302  
H315  
H319

**Hazard Classification; Hazard Statement**

Acute Tox. 4 oral, Harmful if swallowed  
Skin Irrit. 2, Causes skin irritation  
Eye Irrit. 2, Causes serious eye irritation

## 1 mg Inert Carrier [Poly-A] powder

Do not need labelling as hazardous

Signal word -

No Hazard Class

## 1.5 mL RNase-free Water

Do not need labelling as hazardous

Signal word -

No Hazard Class

## 2.2 Label Elements, including precautionary statements

### 21 mL VNA Lysis Buffer



Signal word: Warning

### 4 mL BS Buffer (Concentrated)



Signal word: Warning

### 21 mL WBA Buffer



Signal word: Warning

### 8 mL WBB Buffer (Concentrated)



Signal word: Warning

### 1 mg Inert Carrier [Poly-A] powder

Do not need labelling as hazardous.

Signal word: -

### 1.5 mL RNase-free Water

Do not need labelling as hazardous.

Signal word: -

#### Precautionary statement(s):

##### Prevention

P264: Wash exposed skin thoroughly after handling

P270: Do not eat, drink, or smoke when using this product

P280: Wear protective gloves/protective clothing/eye protection/face protection

##### Response

P302 + P352: IF ON SKIN: Wash with soap and water

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes

Remove contact lenses, if present and easy to do – continue rinsing

P312: Call a POISON CENTER or doctor/ physician if you feel unwell

P330: IF SWALLOWED: Rinse mouth

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 reuse

### 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 particular risks to human and possible symptoms

This mixture has not been tested to determine the overall health hazard.

#### 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

#### 21 mL VNA Lysis Buffer

Chemical: sodium lauroyl sarcosinate CAS No.: 137-16-6

GHS Classification: H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H319, Eye Irrit. 2, H335, STOT SE 3

Formula: C<sub>15</sub> H<sub>28</sub> NNaO<sub>3</sub>

Pseudonym: sodium N-lauroylsarcosinate, sarkosyl NL

EC No.: 205-281-5

Concentration: 0.5 to <2.0 %

acc. CLP (GHS): H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H319, Eye Irrit. 2, H335, STOT SE 3

Chemical: guanidine thiocyanate CAS No.: 593-84-0

GHS Classification: H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H319, Eye Irrit. 2, H335, STOT SE 3

Formula: C<sub>2</sub> H<sub>6</sub> N<sub>4</sub> S

Pseudonym: guanidinium thiocyanate

EC No.: 209-812-1

Concentration: 5.0 to <10.0 %

acc. CLP (GHS): H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H319, Eye Irrit. 2, H335, STOT SE 3

## 4 mL BS Buffer (Concentrated)

Chemical: potassium acetate CAS No.: 127-08-02  
GHS Classification: H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H319, Eye Irrit. 2, H335, STOT SE 3  
Formula:  $C_2H_3O_2K$   
Pseudonym: acetic acid potassium salt  
EC No.: 204-822-2  
Concentration: 5.0 to <10.0 %  
acc. CLP (GHS): H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H319, Eye Irrit. 2, H335, STOT SE 3

## 21 mL WBA 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:  $CH_6ClN_3$   
Pseudonym: guanidinium chloride  
EC No.: 200-002-3  
Concentration: 5.0 to <10.0 %  
acc. CLP (GHS): H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H319, Eye Irrit. 2

## 8 mL WBB Buffer (Concentrated)

Chemical: tris hydrochloride CAS No.: 1185-53-1  
GHS Classification: H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H319, Eye Irrit. 2  
Formula:  $C_4H_{12}ClNO_3$   
Pseudonym: tris(hydroxymethyl)aminomethane hydrochloride, tromethamine hydrochloride  
EC No.: 214-684-5  
Concentration: <1.0 %  
acc. CLP (GHS): H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H319, Eye Irrit. 2

## 1 mg Inert Carrier [Poly-A] powder

No component or ingredient is contributing to hazard.

## 1.5 mL RNase-free Water

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<sub>x</sub>)

### **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 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**

Nil.

## **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

#### 21 mL VNA Lysis Buffer

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

#### 4 mL BS Buffer (Concentrated)

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

#### 21 mL WBA Buffer

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

#### 8 mL WBB Buffer (Concentrated)

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

#### 1 mg Inert Carrier [Poly-A] powder

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

#### 1.5 mL RNase-free Water

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

#### 21 mL VNA Lysis Buffer

Appearance: Liquid  
pH: 7.5 - 8.5

Colour: Colourless  
Specific gravity: No data available

Odour: Odourless

#### 4 mL BS Buffer (Concentrated)

Appearance: Liquid  
pH: 7.5 - 8.5

Colour: Colourless  
Specific gravity: No data available

Odour: Odourless

#### 21 mL WBA Buffer

Appearance: Liquid  
pH: 7.5 - 8.5

Colour: Colourless  
Specific gravity: No data available

Odour: Odourless

#### 8 mL WBB Buffer (Concentrated)

Appearance: Liquid  
pH: 7.5 - 8.5

Colour: Colourless  
Specific gravity: No data available

Odour: Odourless

#### 1 mg Inert Carrier [Poly-A] powder

Appearance: Liquid  
pH: 7.5 - 8.5

Colour: Colourless  
Specific gravity: No data available

Odour: Odourless

#### 1.5 mL RNase-free Water

Appearance: Liquid  
pH: 7.5 - 8.5

Colour: Colourless  
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 not available.

### 10.2 Chemical stability

Store according to the recommended temperature on the container label.

### 10.3 Possibility of hazardous reactions

Hazardous reaction has 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**

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**

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

**Contaminated packaging:** Dispose-off as unused product.

**SECTION 14 – TRANSPORT INFORMATION**

**UN Number**

ADR/RID: -

IMDG: -

IATA-DGR: -

**UN Proper Shipping Name:**

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA-DGR: Not dangerous goods

**Transport Hazard Class(es)**

ADR/RID: -

IMDG: -

IATA-DGR: -

**Packing Group**

ADR/RID: -

IMDG: -

IATA-DGR: -

**Environmental Hazards**

ADR/RID: no

IMDG: marine pollutant: no

IATA-DGR: no

**Special Precaution for Users**

Data not available.

## SECTION 15 – REGULATORY INFORMATION

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

## SECTION 16 – OTHER INFORMATION

**Date of Issue:** 4 March, 2022

**Date of Revision:** 4 March, 2022

*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.*