

SECTION 1 – IDENTIFICATION

1.1 Product Identifier:

Product No: KIT-9070-50

Product Name: PrimeWay Stool 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 50 mL STL1 Buffer 1 x 15 mL STL2 Buffer 2 x 45 mL STL3 Buffer 1 x 25 mL Wash Buffer ST 1 x 6 mL Elution Buffer 50 x Stool Bead Tube

1.2 Recommended use of the chemical and restrictions on use:

To extract genomic DNA from stool and gut samples. For R&D use only. Not for pharmaceutical, household, or other uses.

1.3 Supplier Information:

Axil Scientific Pte Ltd Apical Scientific Sdn Bhd 2 Tukang Innovation Grove, No 7-1 to 7-4, Jalan SP 2/7

06-01 JTC MedTech Hub, Taman Serdang Perdana, Seksyen 2

Singapore 618305 Seri Kembangan 43300

Selangor Darul Ehsan, Malaysia

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 Hazard Classification; Hazard Statement

H302 Acute Tox. 4 oral; Harmful if swallowed. H315 Skin Irrit. 2; Causes skin irritation.

H319 Eye Irrit. 2; Causes serious eye irritation. H335 Acute Tox. 3; May cause respiratory irritation.



2.1 GHS Classification of the Substance or Mixture

50 mL STL1 Buffer



Signal word WARNING

<u>Hazard Identification</u> <u>Hazard Classification; Hazard Statement</u>

H302 Acute Tox. 4 oral; Harmful if swallowed.
H315 Skin Irrit. 2; Causes skin irritation.
H319 Eye Irrit. 2; Causes serious eye irritation.

H335 Acute Tox. 3; May cause respiratory irritation.

15 mL STL2 Buffer



Signal word WARNING

<u>Hazard Identification</u> <u>Hazard Classification; Hazard Statement</u>

H315 Skin Irrit. 2; Causes skin irritation. H319 Eye Irrit. 2; Causes serious eye irritation.

90 mL STL3 Buffer



Signal word WARNING

<u>Hazard Identification</u> <u>Hazard Classification; Hazard Statement</u>

H302 Acute Tox. 4 oral; Harmful if swallowed. H315 Skin Irrit. 2; Causes skin irritation.

H319 Eye Irrit. 2; Causes serious eye irritation.

25 mL Wash Buffer ST

Do not need labelling as hazardous

Signal word -

No hazard class

6 mL Elution Buffer

Do not need labelling as hazardous

Signal word -

No hazard class



Stool Bead Tube

Do not need labelling as hazardous

Signal word

No hazard class

2.2 Label Elements, including precautionary statements

50 mL STL1 Buffer



Signal word: WARNING

15 mL STL2 Buffer



Signal word: WARNING

90 mL STL3 Buffer



Signal word: WARNING

25 mL Wash Buffer ST

Do not need labelling as hazardous.

Signal word: -

6 mL Elution Buffer

Do not need labelling as hazardous.

Signal word: -

Stool Bead Tube

Do not need labelling as hazardous.

Signal word: -

Precautionary statement(s): -

Prevention

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

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

P330 Rinse mouth if swallowed.

Response

P264 Wash skin thoroughly after handling.

P301 + P312 If swallowed: Call a POISON CENTER or doctor/physician if you feel unwell.

P302 + P352 If on skin: Wash with plenty of soap and water.

P304 + P340 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for

breathing.

P305 + P351 + If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses,

P338 if present and easy to do. Continue rinsing.

P332 + P313 If skin irritation occurs: Get medical advice/attention.



P337 + P313 If eye irritation persists: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

P501 Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation.

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

Cause after oral intake, impairments of health when ingested in small quantities. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

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

50 mL STL1 Buffer

Chemical: ethylenediaminetetraacetic acid CAS No.: 6381-92-6

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

Tox. 3

Formula: $C_{10}H_{16}N_2O_8$ Pseudonym: EDTA

> edetic acid 200-449-4

EC No.: 200-449-Concentration: ≤1.5%

15 mL STL2 Buffer

Chemical: acetic acid CAS No.: 64-19-7

GHS Classification: H315, Skin Irrit. 2; H319, Eye Irrit. 2

Formula: CH₃COOH ethanoic acid

ethylic acid

methane carboxylic acid

EC No.: 200-580-7 Concentration: ≤10 %

90 mL STL3 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: CH₆ CIN₃

Pseudonym: guanidinium chloride

EC No.: 200-002-3 Concentration: ≤10 %

25 mL Wash Buffer ST

No component or ingredient is contributing to hazard.

6 mL Elution Buffer

No component or ingredient is contributing to hazard.



Stool Bead Tube

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

If product is inhaled, move exposed individual to fresh air. If individual is not breathing, begin artificial respiration immediately and obtain medical attention.

Ingestion

After oral intake, lots of water should be drunk after it has been ingested. 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 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 or liquid-binding material. 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 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

50 mL STL1 Buffer

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

15 mL STL2 Buffer

Chemical: Acetic acid CAS No.: 64-19-7

 DNEL
 : 25 mg/m³ [inh]

 PNEC(water intermittent)
 : 30.58 mg/L

 PNEC(fresh water)
 : 3.058 mg/L

 PNEC(Marine water)
 : 0.3058 mg/L

 PNEC(Soil)
 : 0.478 mg/kg

 NIOSH
 : 10 ppm, 25 mg/m³

 OSHA
 : 10 ppm, 25 mg/m³

90 mL STL3 Buffer

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

DNEL : 3.5 mg/m³ [inh]
PNEC_(fresh water) : Not listed
NIOSH : Not listed
OSHA : Not listed



25 mL Wash Buffer ST

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.

Stool Bead Tube

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 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, 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

50 mL STL1 Buffer

Appearance: Liquid Colour: Colourless Odour: Odourless

pH: 7.5 – 8.5 (Neat, 25 °C) Specific gravity: No data available

15 mL STL2 Buffer

Appearance: Liquid Colour: Colourless Odour: Odourless

pH: 7.5 – 8.5 (Neat, 25 °C) Specific gravity: No data available

90 mL STL3 Buffer

Appearance: Liquid Colour: Colourless Odour: Odourless

pH: 7.5 – 8.5 (Neat, 25 °C) Specific gravity: No data available

25 mL Wash Buffer ST

Appearance: Liquid Colour: Colourless Odour: Odourless

pH: 7.5 – 8.5 (Neat, 25 °C) Specific gravity: No data available



6 mL Elution Buffer

Appearance: Liquid Colour: Colourless Odour: Odourless

pH: 7.5 – 8.5 (Neat, 25 °C) Specific gravity: No data available

Stool Bead Tube

Appearance: Glass bead Colour: White Odour: Odourless

pH: Not applicable Specific gravity: No applicable

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

Stable under normal conditions.

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

Mixture:

Acute toxicity

50 mL STL1 Buffer

Harmful if swallowed.

15 mL STL2 Buffer

Harmful if swallowed.

90 mL STL3 Buffer

Harmful if swallowed.

25 mL Wash Buffer ST

Harmful if swallowed.

6 mL Elution Buffer

Harmful if swallowed.



Skin corrosion/irritation 50 mL STL1 Buffer

Mixture may cause skin irritation and/or dermatitis.

15 mL STL2 Buffer

Mixture may cause skin irritation and/or dermatitis.

90 mL STL3 Buffer

Mixture may cause skin irritation and/or dermatitis.

25 mL Wash Buffer ST

Mixture may cause skin irritation and/or dermatitis.

6 mL Elution Buffer

Mixture may cause skin irritation and/or dermatitis.

Serious eye damage/eye irritation

50 mL STL1 Buffer

Mixture may cause serious eye irritation.

15 mL STL2 Buffer

Mixture may cause serious eye irritation.

90 mL STL3 Buffer

Mixture may cause serious eye irritation.

25 mL Wash Buffer ST

Mixture may cause serious eye irritation.

6 mL Elution Buffer

Mixture may cause serious eye irritation.

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:

Ethylenediaminetetraacetic acid

Acute toxicity:

LD50 Oral - Rat - 2000 mg/kg LD50 Dermal - Rabbit - No data available LC50 Inhalation - Rat - 1 mg



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

Component:

Acetic acid

Acute toxicity:

LD50 Oral - Rat - 3310 mg/kg

LD50 Dermal - Rabbit - 1060 mg/kg

LC50 Inhalation - Rat - 5620 ppm - 1h

Skin corrosion/irritation

Causes severe skin burns.

Serious eye damage/eye irritation

Causes serious eye damage.

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

Component:

Guanidine hydrochloride

Acute toxicity:

LD50 Oral - Rat - 475 mg/kg LD50 Dermal - Rabbit - 2000 mg/kg LC50 Inhalation - Rat - 3.181 – 7.655 mg/L - 4 h

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye irritation.

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 substances and mixtures are not available.

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Other adverse effects

No 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

Not classified as dangerous in the meaning of transport regulations.

UN Number

ADR/RID: - IMDG: - IATA-DGR: -

UN Proper Shipping Name:

ADR/RID: Not dangerous goods IMDG: Not dangerous goods 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

No data available.

SECTION 15 - REGULATORY INFORMATION

Safety, health, and environmental regulations/legislation specific for the substance or mixture No data available.

SECTION 16 - OTHER INFORMATION

Date of Issue: 22 January 2024 Date of Revision: 22 January 2024

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.