BIO-52055 BIO-52056 BIO-52057

ISOLATE II Plasmid Mini Kit Safety Data Sheet



A Meridian Life Science® Company



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue: 27/03/17 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 **Product identifier**

Product form: Mixture

Product name: 5 - 75 mL Resuspension Buffer P1 Cat. No.: BIO-52055, BIO-52056 & BIO-52057

REACH Registration number(s): see SECTION 3.1/3.2 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.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses

Product for analytical use.

Exposure Scenario Classification according REACH, RIP 3.2 Codes: SU 0-2, PC 21, PROC 15, AC 0

The exposure scenario is integrated into sections 1-16.

Uses advised against

not described

1.3 Details of the supplier of the safety data sheet

Bioline (Aust) Pty Ltd Phone: +61 (0)2 9209 4195 1 Central Ave Fax: +61 (0)2 9209 4763 Eveleigh NSW 2015 E-mail: tech@bioline.com

Australia

1.4 **Emergency telephone number**

+61 2 8014 4558 (Australia) (24 hours, 7 days)

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

5 - 75 mL Resuspension Buffer P1

Directive 1999/45/EC

Symbols do not need labelling as hazardous

CLP Directive 1272/2008/EC

GHS pictograms do not need labelling as hazardous

Signal word

No hazard class

2.2 Label elements

5 - 75 mL Resuspension Buffer P1

Directive 1999/45/EC Symbols:

CLP Directive 1272/2008/EC GHS pictograms: do not need labelling as hazardous

Signal word: -

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2.3 Other hazards

Possible Hazards from physicochemical Properties

According to our current status of knowledge and experience we state, that this product does not contain any substances, which - in accordance with EC regulations 1272/2008/EC, 1907/2006/EC, 1999/45/EC and German Regulations for Hazardous goods - have to be declared as dangerous goods, either because of their applied concentration or because of their total amount in anyone kit

An individual package has considerably less hazardous potential.

Information pertaining to particular Risks to Human and possible Symptoms

Information pertaining to particular Risks to the Environment

Other Hazards

SECTION 3: Composition/Information on Ingredients

3.1 Substances or 3.2 Mixtures

5 - 75 mL Resuspension Buffer P1

Chemical: chemicals/mixture < 1%, no declaration necessary CAS No.: -

Concentration: 0,1 - 1 % KE No.: listed

acc. 1999/45/EC: - acc. CLP (GHS): not necessary

3.3 Remarks

- - -

SECTION 4: First aid measures

4.1 Description of first aid measures

Place insured person out of danger zone to fresh air immediately.

4.1.1 After SKIN Contact

Not necessary.

4.1.2 After EYE Contact

Not necessary

4.1.3 After INHALATION of Vapours

Not necessary.

4.1.4 After ORAL Intake

Not necessary.

4.2 Most important symptoms and effects, both acute and delayed

Avoid inhalation of dust. ---

4.3 Indication of any immediate medical attention and special treatment needed

No additionally recommendations.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Fire extinguishers appropriate to the fire classification, and, if applicable, a fire blanket must be available in a prominent location in the work area. All extinguishers like FOAM, WATER SPRAY, DRY POWDER, CARBON DIOXIDE can be used.

5.2 Special hazards arising from the substance or mixture

None

5.3 Advice for firefighters

No, for listed product. Product package burns like paper or plastic.

5.4 Additional Information

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Do not breathe vapours. Not necessary.

6.2 Environmental precautions

not necessary

6.3 Methods and material for containment and cleaning up

Clean working area with water. Flush used water into drains.

6.4 Reference to other sections

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling in accordance with the test instruction, that comes with the product.

7.2 Conditions for safe storage, including any incompatibilities

The original product package allows a safe storage.

Storage class (VCI): 12 WGK (DE): 1

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 analytical use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

5 - 75 mL Resuspension Buffer P1

Chemical: chemicals/mixture < 1%, no declaration necessary

CAS No.: -

8.2 Exposure controls

Not necessary. Good ventilation and extraction system in the room, floor resistant to chemicals with floor drainage and washing facilities.

8.2.1 Respiratory Protection

Not necessary.

8.2.2 Hand Protection

Not necessary

8.2.3 Eye Protection

Not necessary

8.2.4 Skin Protection

Not necessary.

8.2.5 Personal Hygiene

Information not necessary.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

5 - 75 mL Resuspension Buffer P1

Appearance: liquid Color: colourless Odor: odorless

pH: 7.5-8.5 Specific gravity: 1.00 g/cm³

9.2 Other information

Relevant Properties of Substance Group

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9.2.1

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

SECTION 10: Stability and reactivity

10.1 Reactivity

None

10.2 Chemical stability

No known instability.

10.3 Possibility of hazardous reactions

None.

10.4 Conditions to avoid

Or when indicated in packing insert.

10.5 Incompatible materials

Not necessary.

10.6 Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Following information is valid for pure substances. Quantitative data on the toxicity of this product are not available.

5 - 75 mL Resuspension Buffer P1

Chemical: chemicals/mixture < 1%, no declaration necessary CAS No.: -

Korea Exist.Chem.Inventory: listed

SECTION 12: Ecological information

12.1 Toxicity

Following information is valid for pure substances.

5 - 75 mL Resuspension Buffer P1

Chemical: chemicals/mixture < 1%, no declaration necessary CAS No.: -

WGK (DE): 1 Storage class (VCI): 12-13

12.2 Persistence and degradability

not necessary

12.3 Bioaccumulative potential

not necessary

12.4 Mobility in soil

not necessary

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

no additional data available

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SECTION 13: Disposal considerations

Not necessary.

13.1 Waste treatment methods

GENERAL: Empty solids into municipal waste, empty liquids diluted into drains. Normally it is possible to empty small amounts (diluted!) into drains

SECTION 14: Transport information

14.1 - 14.4 Not necessary

14.5 Environmental hazards

not necessary

14.6 Special precautions for user

not necessary

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

not applicable

SECTION 15: Regulatory Information

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

15.2 Chemical safety assessment

not necessary for these small amounts

SECTION 16: Other Information

16.1 List of R, H and P phrases

16.1.1 List of relevant R phrases

16.1.2 List of relevant H phrases

16.1.3 List of relevant P phrases

16.2 Training Advice

Regular safety training.

16.3 Recommended Restriction on Use

None

16.4 Further Information

Bioline Reagents Ltd provides the information contained herein in good faith being up-to-date of own realizations at revision time. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgement in determining its appropriateness for a particular purpose.

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16.5 Sources of Key Data

Regulation 453/2010/EU REACH - REQUIREMENTS FOR THE COMPILATION OF SAFETY DATA SHEETS

Regulation 487/2013/EU, 4^{th} adaptation of CLP regulation to technical and scientific progress

TRGS 900, German engineering rules governing limits in air at work, updated February 2015

SUVA .CH, Limits in air at work 2009, revised on 01.2009

KÜHN, BIRETT Merkblätter Gefährliche Arbeitsstoffe (Data Sheets of Hazardous Substances)

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product form: Mixture

Product name: 5 - 100 mL Lysis Buffer P2

Cat. No.: BIO-52055, BIO-52056 & BIO-52057

REACH Registration number(s): see SECTION 3.1/3.2 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.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses

Product for analytical use.

Exposure Scenario Classification according REACH, RIP 3.2 Codes: SU 0-2, PC 21, PROC 15, AC 0

The exposure scenario is integrated into sections 1-16.

Uses advised against

not described

1.3 Details of the supplier of the safety data sheet

 Bioline (Aust) Pty Ltd
 Phone: +61 (0)2 9209 4195

 1 Central Ave
 Fax: +61 (0)2 9209 4763

 Eveleigh NSW 2015
 E-mail: tech@bioline.com

Australia

1.4 Emergency telephone number

+61 2 8014 4558 (Australia) (24 hours, 7 days)

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

5 - 100 mL Lysis Buffer P2

Directive 1999/45/EC

Symbols do not need labelling as hazardous

CLP Directive 1272/2008/EC

GHS pictograms



GHS07

Signal word WARNING

Hazard identification Hazard classes/categories
H315 Skin Irritation cat. 2
H319 Eye Irritation cat. 2

2.2 Label elements

According 1999/45/EC small amounts of harmful and highly flammable preparations/mixtures have partly/completely exemption from labelling (no symbols F, O, Xn, Xi, N and no R and S phrases are necessary) until $\bf 25-125~mL|g$.

According **CLP (GHS)** inner packages must be only labelled with symbol(s) and product identificator (EU 1272/2008 Annex I - 1.5.1.2). Harmful chemicals/mixtures with signal word: **WARNING** must not be labelled with H and P phrases **until 125 mL** (EU 1272/2008 Annex I - 1.5.2).

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5 - 100 mL Lysis Buffer P2

Directive 1999/45/EC Symbols:

CLP Directive 1272/2008/EC GHS pictograms:



Signal word: WARNING

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

Information pertaining to particular Risks to the Environment

Other Hazards

SECTION 3: Composition/Information on Ingredients

3.1 **Substances or 3.2 Mixtures**

5 - 100 mL Lysis Buffer P2

CAS No.: 1310-73-2 Chemical: sodium hydroxide solution

Concentration: 0.5 - 1 % Formula: NaOH•H2 O

Pseudonym: sodalye

REACH Reg. No.: 01-2119457892-27-xxxx

EC No.: 215-185-5 Indice No.: 011-002-00-6

WB4900000 RTECS: TSCA Inventory: listed KE-31487 KE No.:

acc. 1999/45/EC: acc. CLP (GHS): H315, H319

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

< 1.00 % Concentration: Formula: C₁₂ H₂₅ NaO₄ S

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

REACH Reg. No.: 01-2119489461-32-xxxx

EC No.: 205-788-1

WT1050000 MFCD: 00036175 RTECS:

TSCA Inventory: listed KE No .:

KE-21884

acc. 1999/45/EC: acc. CLP (GHS): not necessary

3.3

List of R, H and P phrases: see section 16

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SECTION 4: First aid measures

4.1 Description of first aid measures

Place insured person out of danger zone to fresh air immediately. Ensure quiet, warmth, and provide resuscitation if necessary. If necessary contact medical advice.

4.1.1 After SKIN Contact

Remove contaminated clothing. Rinse the affected skin or mucous membrane thoroughly under running water. (If possible) use soap.

4.1.2 After EYE Contact

After contact with the eyes rinse thoroughly under running water with the eyelid wide open with eye washing bottle, eye douche or running water (protect intact eye).

4.1.3 After INHALATION of Vapours

After inhalation of foam or vapour fresh air should be inhaled. Keep airways free.

4.1.4 After ORAL Intake

After oral intake lots of water should be drunk after it has been ingested.

4.2 Most important symptoms and effects, both acute and delayed

Avoid inhalation of dust. ---

4.3 Indication of any immediate medical attention and special treatment needed

No additionally recommendations.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Fire extinguishers appropriate to the fire classification, and, if applicable, a fire blanket must be available in a prominent location in the work area. All extinguishers like FOAM, WATER SPRAY, DRY POWDER, CARBON DIOXIDE can be used.

5.2 Special hazards arising from the substance or mixture

Formation of hazardous and caustic vapour-air mixtures possible.

5.3 Advice for firefighters

No, for listed product. Product package burns like paper or plastic.

5.4 Additional Information

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Do not breathe vapours. Regular staff training is necessary.

6.2 Environmental precautions

not necessary

WGK (DE):

6.3 Methods and material for containment and cleaning up

Bind any escaping liquid with inert absorbent. Collect small amounts of leaked liquid and flush with water into drains.

6.4 Reference to other sections

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling in accordance with the test instruction, that comes with the product.

7.2 Conditions for safe storage, including any incompatibilities

The original product package allows a safe storage. Storage class (VCI):

7.2.1 Requirements for Stock Rooms and Containers

Keep original product packages tightly closed during handling and storage.

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7.3 Specific end use(s)

Product for analytical use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

5 - 100 mL Lysis Buffer P2

Chemical: sodium hydroxide solution CAS No.: 1310-73-2

DNEL: 1_{inh} mg/m³
DNEL = Derived No-Effect Level (for workers)
TRGS 900 (DE): (2 E) mg/m³
E/e respirable

Short-term exposure factor: (=1=, Y) skin resorptive (H), respiratory sensitizable (Sa), skin sensitizable (Sh), teratogenic (Z) not securely excluded / (Y) certainly excluded

SUVA(CH) MAK value: 2 e mg/m³ NIOSH: 2 mg/m³ OSHA: TWA 2 mg/m³

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

NIOSH: not listed OSHA: not listed

8.2 Exposure controls

Good ventilation and extraction system in the room, floor resistant to chemicals with floor drainage and washing facilities. The highest level of cleanliness must be maintained at the workplace.

8.2.1 Respiratory Protection

Only if additional recommendations in test instruction or packing insert.

8.2.2 Hand Protection

Yes, gloves according EN 374 (permeation time >30 min - level 2), consist of PVC, natural latex, Neopren, or Nitril (f.ex. from Ansell or KCL). Use for short times chemical resistant latex gloves with code EN 374-3 level 1.

8.2.3 Eye Protection

Yes, safety glasses according EN 166 with integrated side shields or wrap-around protection.

8.2.4 Skin Protection

Not necessary.

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

5 - 100 mL Lysis Buffer P2

Appearance: liquid Color: colourless Odor: odorless

pH: > 12 Specific gravity: 1.008 g/mL

9.2 Other information

Relevant Properties of Substance Group

9.2.1

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

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

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10.2 Chemical stability

No known instability.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

Or when indicated in packing insert.

10.5 Incompatible materials

Not necessary.

10.6 Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Following information is valid for pure substances. Quantitative data on the toxicity of this product are not available.

5 - 100 mL Lysis Buffer P2

Chemical: sodium hydroxide solution CAS No.: 1310-73-2

TSCA Inventory: listed California Proposition 65 List: not listed

Exposure Routes: inhalation, ingestion, skin and/or eye contact

Target Organs: Eyes, skin, respiratory system

Symptoms: irritation eyes, skin, mucous membrane; pneumonitis; eye, skin burns; temporary loss of hair

Australia NICNAS: not listed Canada CEPA 1999: DSL Yes

Japan CSCL/PRTR: not listed

Japan PDSCL: not listed Japan ISHL: listed ≥1,0%/≥1,0%, Article 57-2 (SDS required)

South Korea TCCA: not listed
Korea Exist.Chem.Inventory: KE-31487
LD50_{orl rat}: 500_{100%} mg/kg
LD50_{orl mus}: 40 mg/kg

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

TSCA Inventory: listed California Proposition 65 List: not listed
Australia NICNAS: not listed Canada CEPA 1999: DSL yes
Japan CSCL/PRTR: PRTR - Class I Designated Chemical Substance

Japan PDSCL: not listed Japan ISHL: not listed

South Korea TCCA: not listed
Korea Exist.Chem.Inventory: KE-21884
LD50_{orl rat}: 1288 mg/kg
LC50_{inh rat}: 3900_{1h} mg/m³
LD50_{drm rbt}: 10 g/kg

SECTION 12: Ecological information

12.1 Toxicity

Following information is valid for pure substances.

5 - 100 mL Lysis Buffer P2

Chemical: sodium hydroxide solution CAS No.: 1310-73-2

LC50_{leuciscus idus/96h}: 35-189 mg/L LC50_{fish/96h}: 45.4 mg/L EC50_{daphnia/48h}: >100 mg/L

WGK (DE): 1 WGK No.: 142

Storage class (VCI): 8 B

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

LC50_{daphnia magna/48h}: 6.3 mg/L

LC50_{fish/96h}: 1.31-22.5 mg/L WGK (DE): 2

WGK (DE): 2
Dispersion coefficient_(octanol-water): 1.6
Storage class (VCI): 12-13

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12.2 Persistence and degradability

not necessary

12.3 Bioaccumulative potential

not necessary

12.4 Mobility in soil

not necessary

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

no additional data available

SECTION 13: Disposal considerations

Please observe local regulations for collection and disposal of hazardous waste and contact waste disposal company, where you will obtain information on laboratory waste disposal (waste code number 16 05 06).

13.1 Waste treatment methods

Normally it is possible to empty small amounts (diluted!) into drains.

SECTION 14: Transport information

14.1 - 14.4 Not necessary

14.5 Environmental hazards

not necessary, contains only small quantities of hazardous substances

14.6 Special precautions for user

not necessary

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

not applicable

SECTION 15: Regulatory Information

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

German act governing protection from hazardous substances (Chemicals Act / Chemikaliengesetz- ChemG), revised on August 2013 German order governing protection from hazardous substances (Ordinance on Hazardous Substances / Gefahrstoffverordnung - GefStoffV), revised on November 2010, according to Directive 98/24/EC

TRGS 200, German engineering rules governing the classification and labelling of hazardous substances, preparations and products, updated October 2011

15.2 Chemical safety assessment

not necessary for these small amounts

SECTION 16: Other Information

16.1 List of R, H and P phrases

16.1.1 List of relevant R phrases

16.1.2 List of relevant H phrases

H315 Causes skin irritation. H319 Causes serious eye irritation.

16.1.3 List of relevant P phrases

P264W Wash with water thoroughly after handling.
P280sh Wear protective gloves/eye protection.
P302+352 IF ON SKIN: Wash with plenty of water/

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing.

P332+313 If skin irritation occurs: Get medical advice/attention. P337+313 If eye irritation persists: Get medical advice/attention.

16.2 Training Advice

Regular safety training.

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16.3 Recommended Restriction on Use

Only for professional user.

An individual package of this product or test kit has a moderate hazardous potential.

16.4 Further Information

Bioline Reagents Ltd provides the information contained herein in good faith being up-to-date of own realizations at revision time. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgement in determining its appropriateness for a particular purpose.

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16.5 Sources of Key Data

Regulation 453/2010/EU REACH - REQUIREMENTS FOR THE COMPILATION OF SAFETY DATA SHEETS Regulation 487/2013/EU, 4th adaptation of CLP regulation to technical and scientific progress TRGS 900, German engineering rules governing limits in air at work, updated February 2015 SUVA .CH, Limits in air at work 2009, revised on 01.2009 KÜHN, BIRETT Merkblätter Gefährliche Arbeitsstoffe (Data Sheets of Hazardous Substances)

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Neutralization Buffer P3

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue: 27/03/17 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 **Product identifier**

Product form: Mixture

Product name: 5 - 100 mL Neutralization Buffer P3 Cat. No.: BIO-52055, BIO-52056 & BIO-52057

see SECTION 3.1/3.2 or REACH Registration number(s):

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.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses

Product for analytical use.

Exposure Scenario Classification according REACH, RIP 3.2 Codes: SU 0-2, PC 21, PROC 15, AC

0 The exposure scenario is integrated into sections 1-16.

Uses advised against

not described

1.3 Details of the supplier of the safety data sheet

Bioline (Aust) Pty Ltd Phone: +61 (0)2 9209 4195 1 Central Ave Fax: +61 (0)2 9209 4763 Eveleigh NSW 2015 E-mail: tech@bioline.com

Australia

1.4 **Emergency telephone number**

+61 2 8014 4558 (Australia) (24 hours, 7 days)

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

5 - 100 mL Neutralization Buffer P3

Directive 1999/45/EC

R 36

Symbols



CLP Directive 1272/2008/EC

GHS pictograms



Signal word WARNING

Hazard identification Hazard classes/categories

H302 Acute Tox. 4 oral H319 Eye Irritation cat. 2

2.2 Label elements

According 1999/45/EC small amounts of harmful and highly flammable preparations/mixtures have partly/completely exemption from labelling (no symbols F, O, Xn, Xi, N and no R and S phrases are necessary) until 25-125 mL|g.

According CLP (GHS) inner packages must be only labelled with symbol(s) and product identificator (EU 1272/2008 Annex I - 1.5.1.2). Harmful chemicals/mixtures with signal word: WARNING must not be labelled with H and P phrases until 125 mL (EU 1272/2008 Annex I - 1.5.2).

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Neutralization Buffer P3

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5 - 100 mL Neutralization Buffer P3

Directive 1999/45/EC Symbols:



Xi R 36

Irritating to eyes.

S 26-39

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear eye/face protection.

CLP Directive 1272/2008/EC GHS pictograms:



Signal word: WARNING

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. ---

Information pertaining to particular Risks to the Environment

Other Hazards

SECTION 3: Composition/Information on Ingredients

3.1 Substances or 3.2 Mixtures

5 - 100 mL Neutralization Buffer P3

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

Concentration: 36 - 50 % Formula: CH₆ CIN₃ Pseudonym: guanidinium chloride

REACH Reg. No.: ---

REACH Preregistration (for): 05-2114282045-53-0000 (2018)

EC No.: 200-002-3 Indice No.: 607-148-00-0 RTECS: MF4300000 MFCD: 00013026

TSCA Inventory: listed

KE No.: KE-18111

acc. 1999/45/EC: R 22-36 acc. CLP (GHS): H302, H319

3.3 Remarks

List of R, H and P phrases: see section 16

SECTION 4: First aid measures

4.1 Description of first aid measures

Place insured person out of danger zone to fresh air immediately. Ensure quiet, warmth, and provide resuscitation if necessary. If necessary contact medical advice.

4.1.1 After SKIN Contact

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Wash Buffer PW1

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue: 27/03/17 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 **Product identifier**

Product form:

Product name: 5 - 75 mL Wash Buffer PW1 BIO-52055, BIO-52056 & BIO-52057 Cat. No.:

REACH Registration number(s): see SECTION 3.1/3.2 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.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses

Product for analytical use.

Exposure Scenario Classification according REACH, RIP 3.2 Codes: SU 0-2, PC 21, PROC 15, AC 0

The exposure scenario is integrated into sections 1-16.

Uses advised against

not described

1.3 Details of the supplier of the safety data sheet

Bioline (Aust) Pty Ltd Phone: +61 (0)2 9209 4195 1 Central Ave Fax: +61 (0)2 9209 4763 Eveleigh NSW 2015 E-mail: tech@bioline.com

Australia

1.4 **Emergency telephone number**

+61 2 8014 4558 (Australia) (24 hours, 7 days)

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

5 - 75 mL Wash Buffer PW1

Directive 1999/45/EC

Symbols do not need labelling as hazardous

CLP Directive 1272/2008/EC

GHS pictograms do not need labelling as hazardous

Signal word

No hazard class

2.2 Label elements

5 - 75 mL Wash Buffer PW1

Directive 1999/45/EC Symbols:

CLP Directive 1272/2008/EC GHS pictograms:

do not need labelling as hazardous

Signal word: -

03/27/17 EN (English)



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue: 27/03/17 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 **Product identifier**

Product form: Mixture

Product name: 5 - 25 mL Wash Buffer PW2 (conc.) Cat. No.: BIO-52055, BIO-52056 & BIO-52057

see SECTION 3.1/3.2 or REACH Registration number(s):

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.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses

Product for analytical use.

Exposure Scenario Classification according REACH, RIP 3.2 Codes: SU 0-2, PC 21, PROC 15, AC 0

The exposure scenario is integrated into sections 1-16.

Uses advised against

not described

1.3 Details of the supplier of the safety data sheet

Bioline (Aust) Pty Ltd Phone: +61 (0)2 9209 4195 1 Central Ave Fax: +61 (0)2 9209 4763 Eveleigh NSW 2015 E-mail: tech@bioline.com

Emergency telephone number 1.4

Australia

+61 2 8014 4558 (Australia) (24 hours, 7 days)

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

5 - 25 mL Wash Buffer PW2 (conc.)

Directive 1999/45/EC

R 36

Symbols



CLP Directive 1272/2008/EC

GHS pictograms





Signal word WARNING

Hazard identification Hazard classes/categories H226 Flammable Liquid cat. 3 H302 Acute Tox 4 oral H319 Eve Irritation cat. 2 H336 STOT SE 3

2.2 Label elements

According 1999/45/EC small amounts of harmful and highly flammable preparations/mixtures have partly/completely exemption from labelling (no symbols F, O, Xn, Xi, N and no R and S phrases are necessary) until 25-125 mL|g.

According CLP (GHS) inner packages must be only labelled with symbol(s) and product identificator (EU 1272/2008 Annex I - 1.5.1.2). Harmful chemicals/mixtures with signal word: WARNING and highly flammable chemicals/mixtures must not be labelled with H and P

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phrases until 125 mL (EU 1272/2008 Annex I - 1.5.2).

The irritant hazard should be eliminated, because of buffer chemicals inside.

5 - 25 mL Wash Buffer PW2 (conc.)

Directive 1999/45/EC Symbols:



Xi

R 36

Irritating to eyes.

S 16-26-39

Keep away from sources of ignition — No smoking. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear eye/face protection.

CLP Directive 1272/2008/EC GHS pictograms:





SHS02 GHS0

Signal word: WARNING

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. Vapour forms explosive mixtures with air.

Information pertaining to particular Risks to Human and possible Symptoms

Cause after oral intake, impairments of health when ingested in small quantities. ---

Information pertaining to particular Risks to the Environment

Other Hazards

SECTION 3: Composition/Information on Ingredients

3.1 Substances or 3.2 Mixtures

5 - 25 mL Wash Buffer PW2 (conc.)

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

Concentration: 36 - 50 % Formula: CH₆ ClN₃ Pseudonym: guanidinium chloride

REACH Reg. No.: ---

REACH Preregistration (for): 05-2114282045-53-0000 (2018)

EC No.: 200-002-3 Indice No.: 607-148-00-0 RTECS: MF4300000 MFCD: 00013026

TSCA Inventory: listed

KE No.: KE-18111

acc. 1999/45/EC: R 22-36 acc. CLP (GHS): H302, H319

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue: 27/03/17 Version: 1.0

Chemical: 2-propanol CAS No.: 67-63-0

Concentration: 20 - 50 % Formula: C₃ H₈ O

Pseudonym: isopropanol, IPA, propan-2-ol REACH Reg. No.: 01-2119457558-25-xxxx

EC No.: 200-661-7 Indice No.: 603-117-00-0 RTECS: NT8050000 MFCD: 00011674

TSCA Inventory: listed

KE No.: KE-29363 acc. 1999/45/EC: R 10-36-67

acc. CLP (GHS): H226, H319, H336

3.3 Remarks

List of R, H and P phrases: see section 16

SECTION 4: First aid measures

4.1 Description of first aid measures

Place insured person out of danger zone to fresh air immediately. Ensure quiet, warmth, and provide resuscitation if necessary. If necessary contact medical advice.

4.1.1 After SKIN Contact

Remove contaminated clothing. Rinse the affected skin or mucous membrane thoroughly under running water. (If possible) use soap.

4.1.2 After EYE Contact

After contact with the eyes rinse thoroughly under running water with the eyelid wide open with eye washing bottle, eye douche or running water (protect intact eye).

4.1.3 After INHALATION of Vapours

After inhalation of foam or vapour fresh air should be inhaled. Keep airways free.

4.1.4 After ORAL Intake

After oral intake lots of water should be drunk after it has been ingested.

4.2 Most important symptoms and effects, both acute and delayed

Avoid inhalation of dust. ---

4.3 Indication of any immediate medical attention and special treatment needed

No additionally recommendations.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Fire extinguishers appropriate to the fire classification, and, if applicable, a fire blanket must be available in a prominent location in the work area. All extinguishers like FOAM, WATER SPRAY, DRY POWDER, CARBON DIOXIDE can be used.

5.2 Special hazards arising from the substance or mixture

WARNING: Flammable (GHS regulation). May form explosive vapour-air mixtures. Formation of hazardous and caustic vapour-air mixtures possible.

5.3 Advice for firefighters

No, for listed product. Product package burns like paper or plastic.

5.4 Additional Information

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Do not breathe vapours. Regular staff training is necessary.

6.2 Environmental precautions

not necessary

6.3 Methods and material for containment and cleaning up

Bind any escaping liquid with inert absorbent. Collect small amounts of leaked liquid and flush with water into drains.

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Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue: 27/03/17 Version: 1.0

6.4 Reference to other sections

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling in accordance with the test instruction, that comes with the product.

7.2 Conditions for safe storage, including any incompatibilities

The original product package allows a safe storage.

Storage class (VCI): 3 WGK (DE): 1

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 analytical use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

5 - 25 mL Wash Buffer PW2 (conc.)

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

NIOSH: not listed OSHA: not listed

Chemical: 2-propanol CAS No.: 67-63-0

DNEL: 500_{inh} mg/m³
DNEL = Derived No-Effect Level (for workers)

TRGS 900 (DE): 200 ppm / 500 mg/m³

E/e respirable

Short-term exposure factor: 2 (II), Y

skin resorptive (H), respiratory sensitizable (Sa), skin sensitizable (Sh), teratogenic (Z) not securely excluded / (Y) certainly excluded

SUVA(CH) MAK value: 200 ppm / 500 mg/m³ TRGS 903 (DE): B/b, U/b 25_{Aceton} mg/L

B blood, U urine

NIOSH: TWA 400 ppm / 980 mg/m³; ST 500 ppm / 1225 mg/m³

NIOSH STEL: 1225 mg/m³

OSHA: TWA 400 ppm / 980 mg/m³

8.2 Exposure controls

Good ventilation and extraction system in the room, floor resistant to chemicals with floor drainage and washing facilities. The highest level of cleanliness must be maintained at the workplace.

8.2.1 Respiratory Protection

Only if additional recommendations in test instruction or packing insert.

8.2.2 Hand Protection

Yes, gloves according EN 374 (permeation time >30 min - level 2), consist of PVC, natural latex, Neopren, or Nitril (f.ex. from Ansell or KCL). Use for short times chemical resistant latex gloves with code EN 374-3 level 1.

8.2.3 Eye Protection

Yes, safety glasses according EN 166 with integrated side shields or wrap-around protection.

8.2.4 Skin Protection

Not necessary.

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.

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue: 27/03/17 Version: 1.0

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

5 - 25 mL Wash Buffer PW2 (conc.)

Appearance: liquid Color: colourless Odor: alcoholic

pH: 7-8
Flash point: 25 °C
Specific gravity: 1.06 g/cm³

9.2 Other information

Relevant Properties of Substance Group

9.2.1

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

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

No known instability.

10.3 Possibility of hazardous reactions

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

10.4 Conditions to avoid

Or when indicated in packing insert.

10.5 Incompatible materials

Not necessary.

10.6 Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Following information is valid for pure substances. Quantitative data on the toxicity of this product are not available.

5 - 25 mL Wash Buffer PW2 (conc.)

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

TSCA Inventory: listed California Proposition 65 List: not listed
Australia NICNAS: not listed Canada CEPA 1999: DSL yes
Japan CSCL/PRTR: not listed

Japan PDSCL: not listed Japan ISHL: not listed

South Korea TCCA: not listed
Korea Exist.Chem.Inventory: KE-18111
LD50orl rat: 475 mg/kg
LC50ihl rat: 5.34h mg/m³
LD50drm rbt: >2000 mg/kg

Acute Effects: Cause after oral intake, impairments of health when ingested in small quantities.

Chemical: 2-propanol CAS No.: 67-63-0

TSCA Inventory: listed California Proposition 65 List: not listed

ACGIH: 1230 ppm

Exposure Routes: inhalation, ingestion, skin and/or eye contact

Target Organs: Eyes, skin, respiratory system

Symptoms: irritation eyes, nose, throat; drowsiness, dizziness, headache; dry cracking skin; in animals: narcosis

Australia NICNAS: Canada CEPA 1999: DSL yes

Japan CSCL/PRTR: PAC yes

Japan PDSCL: Japan ISHL: listed ≥1,0%/≥0,1%, Article 57-2 (SDS required)

South Korea TCCA:

Korea Exist.Chem.Inventory: KE-29363 LD50_{orl rat}: 5045 mg/kg LC_Loworl hmn: 3570 mg/kg

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SECTION 12: Ecological information

12.1 Toxicity

Following information is valid for pure substances.

5 - 25 mL Wash Buffer PW2 (conc.)

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

LC50_{leuciscus idus/96h}: 1759 mg/L

WGK (DE): 1 WGK No.: 0788

Storage class (VCI): 12

Chemical: 2-propanol CAS No.: 67-63-0

PNEC(fresh water): 140.9 mg/L

PNEC = Predicted No Effected Concentration

 LC50_{fish/96h}:
 1400 mg/L

 EC50_{daphnia/48h}:
 13.3 g/L

 IC50_{scenedesmus} quadricauda/72h:
 >1000 mg/L

 EC10_{pseudomonas} putita/16h:
 EC5:1050 mg/L

WGK (DE): 1 WGK No.: 0135

Dispersion coefficient_(octanol-water): 0.05 Storage class (VCI): 3

12.2 Persistence and degradability

not necessary

12.3 Bioaccumulative potential

not necessary

12.4 Mobility in soil

not necessary

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

no additional data available

SECTION 13: Disposal considerations

Please observe local regulations for collection and disposal of hazardous waste and contact waste disposal company, where you will obtain information on laboratory waste disposal (waste code number 16 05 06).

13.1 Waste treatment methods

Normally it is possible to empty small amounts (diluted!) into drains.

SECTION 14: Transport information

14.1 UN number: 1993 14.2 UN proper shipping name: Flammable liquid, n.o.s. (2-propanol mixture)

14.3 Class: 3 14.4 Packing group: III

Road transport
Classification code: F1

Limited Quantity: 5 L Tunnel restriction code: E Excepted Quantity: E 1 Special instructions: 640E

Air transport
PAX: 355 max. weight PAX: 60 L
CAO: 366 max. weight CAO: 220 L

Maritime transport

EmS: F-E, S-E Storage category: A

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14.5 Environmental hazards

not necessary, contains only small quantities of hazardous substances

14.6 Special precautions for user

not necessary

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

not applicable

SECTION 15: Regulatory Information

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

German act governing protection from hazardous substances (Chemicals Act / Chemikaliengesetz- ChemG), revised on August 2013 German order governing protection from hazardous substances (Ordinance on Hazardous Substances / Gefahrstoffverordnung - GefStoffV), revised on November 2010, according to Directive 98/24/EC

TRGS 200, German engineering rules governing the classification and labelling of hazardous substances, preparations and products, updated October 2011

15.2 Chemical safety assessment

not necessary for these small amounts

SECTION 16: Other Information

16.1 List of R, H and P phrases

16.1.1 List of relevant R phrases

R10 Flammable.

R22 Harmful if swallowed. R36 Irritating to eyes.

R67 Vapours may cause drowsiness and dizziness.

16.1.2 List of relevant H phrases

H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

16.1.3 List of relevant P phrases

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

P233 Keep container tightly closed.

P264W Wash with water thoroughly after handling. P280sh Wear protective gloves/eye protection.

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

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing.

P330 Rinse mouth.

P337+313 If eye irritation persists: Get medical advice/attention.
P370+378 In case of fire: Use all extinguisher media to extinguish.

P403+235 Store in a well-ventilated place. Keep cool.

16.2 Training Advice

Regular safety training

16.3 Recommended Restriction on Use

Only for professional user.

An individual package of this product or test kit has a moderate hazardous potential.

16.4 Further Information

Bioline Reagents Ltd provides the information contained herein in good faith being up-to-date of own realizations at revision time. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgement in determining its appropriateness for a particular purpose.

Bioline Reagents Ltd makes NO REPRESENTATIONS or WARRANTIES, either expressed or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which the information refers. Accordingly Bioline Reagents Ltd will not be responsible for damages resulting from use of or reliance upon this information. See terms and conditions at the end of our price lists for additional information.

16.5 Sources of Key Data

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Date of issue: 27/03/17 Version: 1.0

Regulation 453/2010/EU REACH - REQUIREMENTS FOR THE COMPILATION OF SAFETY DATA SHEETS Regulation 487/2013/EU, 4th adaptation of CLP regulation to technical and scientific progress TRGS 900, German engineering rules governing limits in air at work, updated February 2015 SUVA .CH, Limits in air at work 2009, revised on 01.2009 KÜHN, BIRETT Merkblätter Gefährliche Arbeitsstoffe (Data Sheets of Hazardous Substances)

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Safety Data Sheet

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Date of issue: 27/03/17 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 **Product identifier**

Product form: Mixture

Product name: 10 - 70 mL Elution Buffer P

Cat. No .: BIO-52055, BIO-52056 & BIO-52057

REACH Registration number(s): see SECTION 3.1/3.2 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.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses

Product for analytical use.

Exposure Scenario Classification according REACH, RIP 3.2 Codes: SU 0-2, PC 21, PROC 15, AC 0

The exposure scenario is integrated into sections 1-16.

Uses advised against

not described

1.3 Details of the supplier of the safety data sheet

Bioline (Aust) Pty Ltd Phone: +61 (0)2 9209 4195 1 Central Ave Fax: +61 (0)2 9209 4763 Eveleigh NSW 2015 E-mail: tech@bioline.com

Australia

1.4 **Emergency telephone number**

+61 2 8014 4558 (Australia) (24 hours, 7 days)

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

10 - 70 mL Elution Buffer P

Directive 1999/45/EC

Symbols do not need labelling as hazardous

CLP Directive 1272/2008/EC

GHS pictograms do not need labelling as hazardous

Signal word

No hazard class

2.2 Label elements

10 - 70 mL Elution Buffer P

Directive 1999/45/EC Symbols:

CLP Directive 1272/2008/EC GHS pictograms: do not need labelling as hazardous Signal word: -

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2.3 Other hazards

Possible Hazards from physicochemical Properties

According to our current status of knowledge and experience we state, that this product does not contain any substances, which - in accordance with EC regulations 1272/2008/EC, 1907/2006/EC, 1999/45/EC and German Regulations for Hazardous goods - have to be declared as dangerous goods, either because of their applied concentration or because of their total amount in anyone kit.

An individual package has considerably less hazardous potential.

Information pertaining to particular Risks to Human and possible Symptoms

Information pertaining to particular Risks to the Environment

Other Hazards

SECTION 3: Composition/Information on Ingredients

3.1 Substances or 3.2 Mixtures

10 - 70 mL Elution Buffer P

Chemical: chemicals/mixture < 1%, no declaration necessary CAS No.: -

Concentration: 0,1 - 1 % KE No.: listed

acc. 1999/45/EC: - acc. CLP (GHS): not necessary

3.3 Remarks

- - -

SECTION 4: First aid measures

4.1 Description of first aid measures

Place insured person out of danger zone to fresh air immediately.

4.1.1 After SKIN Contact

Not necessary.

4.1.2 After EYE Contact

Not necessary.

4.1.3 After INHALATION of Vapours

Not necessary.

4.1.4 After ORAL Intake

Not necessary.

4.2 Most important symptoms and effects, both acute and delayed

Avoid inhalation of dust. ---

4.3 Indication of any immediate medical attention and special treatment needed

No additionally recommendations.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Fire extinguishers appropriate to the fire classification, and, if applicable, a fire blanket must be available in a prominent location in the work area. All extinguishers like FOAM, WATER SPRAY, DRY POWDER, CARBON DIOXIDE can be used.

5.2 Special hazards arising from the substance or mixture

None.

5.3 Advice for firefighters

No, for listed product. Product package burns like paper or plastic.

5.4 Additional Information

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Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue: 27/03/17 Version: 1.0

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Do not breathe vapours. Not necessary.

6.2 Environmental precautions

not necessary

6.3 Methods and material for containment and cleaning up

Clean working area with water. Flush used water into drains.

6.4 Reference to other sections

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling in accordance with the test instruction, that comes with the product.

7.2 Conditions for safe storage, including any incompatibilities

The original product package allows a safe storage.

Storage class (VCI): 12
WGK (DE): 1

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 analytical use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

10 - 70 mL Elution Buffer P

Chemical: chemicals/mixture < 1%, no declaration necessary CAS No.: -

8.2 Exposure controls

Not necessary. Good ventilation and extraction system in the room, floor resistant to chemicals with floor drainage and washing facilities.

8.2.1 Respiratory Protection

Not necessary.

8.2.2 Hand Protection

Not necessary

8.2.3 Eye Protection

Not necessary

8.2.4 Skin Protection

Not necessary.

8.2.5 Personal Hygiene

Information not necessary.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

10 - 70 mL Elution Buffer P

Appearance: liquid Color: colourless Odor: odorless

pH: 8-9 Specific gravity: 1.0 g/cm³

9.2 Other information

Relevant Properties of Substance Group

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Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue: 27/03/17 Version: 1.0

9.2.1

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

SECTION 10: Stability and reactivity

10.1 Reactivity

None

10.2 Chemical stability

No known instability

10.3 Possibility of hazardous reactions

None.

10.4 Conditions to avoid

Or when indicated in packing insert.

10.5 Incompatible materials

Not necessary.

10.6 Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Following information is valid for pure substances. Quantitative data on the toxicity of this product are not available.

10 - 70 mL Elution Buffer P

Chemical: chemicals/mixture < 1%, no declaration necessary CAS No.: -

Korea Exist.Chem.Inventory: listed

SECTION 12: Ecological information

12.1 Toxicity

Following information is valid for pure substances.

10 - 70 mL Elution Buffer P

Chemical: chemicals/mixture < 1%, no declaration necessary CAS No.: -

WGK (DE): 1 Storage class (VCI): 12-13

12.2 Persistence and degradability

not necessary

12.3 Bioaccumulative potential

not necessary

12.4 Mobility in soil

not necessary

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

no additional data available

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Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue: 27/03/17 Version: 1.0

SECTION 13: Disposal considerations

Not necessary.

13.1 Waste treatment methods

GENERAL: Empty solids into municipal waste, empty liquids diluted into drains. Normally it is possible to empty small amounts (diluted!)

SECTION 14: Transport information

14.1 - 14.4 Not necessary

14.5 Environmental hazards

not necessary

14.6 Special precautions for user

not necessary

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

not applicable

SECTION 15: Regulatory Information

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

15.2 Chemical safety assessment

not necessary for these small amounts

SECTION 16: Other Information

16.1 List of R, H and P phrases

16.1.1 List of relevant R phrases

16.1.2 List of relevant H phrases

16.1.3 List of relevant P phrases

16.2 Training Advice

Regular safety training

16.3 Recommended Restriction on Use

None

16.4 Further Information

Bioline Reagents Ltd provides the information contained herein in good faith being up-to-date of own realizations at revision time. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgement in determining its appropriateness for a particular purpose.

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16.5 Sources of Key Data

Regulation 453/2010/EU REACH - REQUIREMENTS FOR THE COMPILATION OF SAFETY DATA SHEETS Regulation 487/2013/EU, 4th adaptation of CLP regulation to technical and scientific progress TRGS 900, German engineering rules governing limits in air at work, updated February 2015 SUVA .CH, Limits in air at work 2009, revised on 01.2009

KÜHN, BIRETT Merkblätter Gefährliche Arbeitsstoffe (Data Sheets of Hazardous Substances)

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue: 20/01/17 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product form: Mixture

Product name: 1 - 30 mg RNase A (lyo)

Cat. No.: BIO-52068, BIO-52069, BIO-52070, BIO-52055, BIO-52056 & BIO-52057

REACH Registration number(s): see SECTION 3.1/3.2 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.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses

Product for analytical use.

Exposure Scenario Classification according REACH, RIP 3.2 Codes: SU 0-2, PC 21, PROC 15, AC

0 The exposure scenario is integrated into sections 1-16.

Uses advised against

not described

1.3 Details of the supplier of the safety data sheet

Bioline (Aust) Pty Ltd

1 Central Ave

Eveleigh NSW 2015

Australia

1.4 Emergency telephone number

Phone: +61 (0)2 9209 4195 Fax: +61 (0)2 9209 4763 E-mail: tech@bioline.com

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

1.5 - 30 mg RNase A (Iyo)

Directive 1999/45/EC

R 42/43

Symbols



Χn

CLP Directive 1272/2008/EC

GHS pictograms

Signal word





GHS08

GHS07

DANGER

Hazard identificationHazard classes/categoriesH317Skin Sensitisation cat. 1A/1BH334Respiratory Sensitisation cat. 1A/1B

2.2 Label elements

According 1999/45/EC small amounts of harmful and highly flammable preparations/mixtures have partly/completely exemption from labelling (no symbols F, O, Xn, Xi, N and no R and S phrases are necessary) until **25-125 mL|g** . This labelling exemption is NOT valid for sensibilizing mixtures.

According **CLP (GHS)** inner packages must be only labelled with symbol(s) and product identificator (EU 1272/2008 Annex I - 1.5.1.2). Harmful chemicals/mixtures with signal word: **WARNING** must not be labelled with H and P phrases **until 125 mL** (EU 1272/2008 Annex I - 1.5.2). This labelling exemption is NOT valid for sensibilizing substances.

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1.5 - 30 mg RNase A (Iyo)

Directive 1999/45/EC Symbols:



Xn D 42/4

R 42/43

May cause sensitization by inhalation and skin contact.

S 22

Do not breathe dust.

CLP Directive 1272/2008/EC GHS pictograms:





GHS07

Signal word: DANGER

H317, H334

May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

P261S, P272, P280sh, P302+352, P304+340, P333+313, P342+311, P363

Avoid breathing dust. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/eye protection. IF ON SKIN: Wash with plenty of water/ IF INHALED: Remove person to fresh air and keep comfortable for breathing. If skin irritation or rash occurs: Get medical advice/attention. If experiencing respiratory symptoms: Call a POISON CENTER/doctor/ Wash contaminated clothing before reuse.

2.3 Other hazards

Possible Hazards from physicochemical Properties

Information pertaining to particular Risks to Human and possible Symptoms

Cause after skin contact, impairments of health when ingested in small quantities. May cause sensitization by skin contact, also in repeated contact of small amounts. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Kit contains small amounts of enzymes, which may cause sensitization by direct and repeated contact.

Information pertaining to particular Risks to the Environment

PBT: not applicable vPvB: not applicable

Other Hazards

SECTION 3: Composition/Information on Ingredients

3.1 Substances or 3.2 Mixtures

1.5 - 30 mg RNase A (Iyo)

Chemical: RNase CAS No.: 9001-99-4

Concentration: 90 - 100 %

Formula: Enzyme Comm. No. 3.1.27.5, origin: bovine pancreas (controlled population)

Pseudonym: Nuclease, ribo-EC No.: 232-646-6 RTECS: RF0760000 TSCA Inventory: listed KE No.: KE-30341

acc. 1999/45/EC: R 42/43 acc. CLP (GHS): H317, H334

3.3 Remarks

List of R, H and P phrases: see section 16

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SECTION 4: First aid measures

4.1 Description of first aid measures

Place insured person out of danger zone to fresh air immediately. Ensure quiet, warmth, and provide resuscitation if necessary. If necessary contact medical advice. Take to a doctor, in a raised position if there are breathing difficulties.

4.1.1 After SKIN Contact

Remove contaminated clothing immediately. Rinse the affected skin or mucous membrane thoroughly for min. 15 minutes under running water. (If possible) use soap. Avoid neutralisation. Then apply a loose bandage.

4.1.2 After EYE Contact

After contact with the eyes rinse thoroughly under running water with the eyelid wide open with eye washing bottle, eye douche or running water (protect intact eye).

4.1.3 After INHALATION of Vapours

After inhalation of foam or vapour fresh air should be inhaled. Keep airways free. Administer a Dexamethasone spray as soon as possible. Ensure quiet, warmth, and provide resuscitation if necessary. In the event of respiratory distress ensure that the patient inhales oxygen. Secure the breathing, heart and circulatory function.

4.1.4 After ORAL Intake

After oral intake lots of water should be drunk after it has been ingested.

4.2 Most important symptoms and effects, both acute and delayed

Chronic Effects: May cause sensitization by skin contact, also in repeated contact of small amounts. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Avoid inhalation of dust. ---

4.3 Indication of any immediate medical attention and special treatment needed

After SKIN CONTACT rinse with water for a long time. Apply glucocorticosteroides following inflammatory reactions. Inform patient respectively further measures and the possibility of long-term damages.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Fire extinguishers appropriate to the fire classification, and, if applicable, a fire blanket must be available in a prominent location in the work area. All extinguishers like FOAM, WATER SPRAY, DRY POWDER, CARBON DIOXIDE can be used.

5.2 Special hazards arising from the substance or mixture

Formation of hazardous and caustic vapour-air mixtures possible.

5.3 Advice for firefighters

No, for listed product. Product package burns like paper or plastic. Spray any vapours released with water. Retent fire water. Use only acid-resistant safety equipment.

For great amount - if necessary - protective breathing apparatus which is independent of the ambient air (isolated equipment), and sealed protective clothing is necessary in the event of a large-scale formation of toxic substances.

5.4 Additional Information

Danger for environment only in the event of a large-scale leakage or formation of hazardous substances. ---

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Do not breathe vapours. Wear suitable protective gloves (see 8.2.2). Wear eye protection. Regular staff training is necessary, indicating hazards and precautions on the basis of operating instructions. Restrictions on activity must be observed.

6.2 Environmental precautions

not necessary

6.3 Methods and material for containment and cleaning up

Bind any escaping liquid with inert absorbent. And dispose in accordance to local regulations for the disposal of 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

see information in section 5.4 ---

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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.

Storage class (VCI): 13
WGK (DE): 1

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 analytical use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1.5 - 30 mg RNase A (Iyo)

Chemical: RNase CAS No.: 9001-99-4

8.2 Exposure controls

Good ventilation and extraction system in the room, floor resistant to chemicals with floor drainage and washing facilities. The highest level of cleanliness must be maintained at the workplace.

8.2.1 Respiratory Protection

Only if additional recommendations in test instruction or packing insert. Use for open access of these substances for example a protection filter, class A/AX.

8.2.2 Hand Protection

Yes, gloves according EN 374 (permeation time >30 min - level 2), consist of PVC, natural latex, Neopren, or Nitril (f.ex. from Ansell or KCL). Use for short times chemical resistant latex gloves with code EN 374-3 level 1.

8.2.3 Eye Protection

Yes, safety glasses according EN 166 with integrated side shields or wrap-around protection.

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

1.5 - 30 mg RNase A (Iyo)

Appearance: solid (lyoph.) Color: colourless Odor: odorless Solubility in water: 0-100 %

9.2 Other information

Relevant Properties of Substance Group

-

9.2.1

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

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

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10.2 Chemical stability

No known instability

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

Not necessary. Only if on label. Or when indicated in packing insert.

10.5 Incompatible materials

Avoid contact with strong acids or alkalines.

10.6 Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Following information is valid for pure substances. Quantitative data on the toxicity of this product are not available.

1.5 - 30 mg RNase A (Iyo)

Chemical: CAS No.: 9001-99-4

TSCA Inventory: listed Japan CSCL/PRTR: not listed Korea Exist.Chem.Inventory: KE-30341 LD50_{intraperitonaeal rat}: 392 mg/kg

Acute Effects: Cause after skin contact, impairments of health when ingested in small quantities.

Chronic Effects: May cause sensitization by skin contact, also in repeated contact of small amounts. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

SECTION 12: Ecological information

12.1 Toxicity

Following information is valid for pure substances.

1.5 - 30 mg RNase A (Iyo)

RNase CAS No.: 9001-99-4

WGK (DE): Storage class (VCI): 13

12.2 Persistence and degradability

not necessary

12.3 Bioaccumulative potential

not necessary

12.4 Mobility in soil

not necessary

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

no additional data available

SECTION 13: Disposal considerations

Please observe local regulations for collection and disposal of hazardous waste and contact waste disposal company, where you will obtain information on laboratory waste disposal (waste code number 16 05 06).

13.1 Waste treatment methods

Normally it is possible to empty small amounts (diluted!) into drains.

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SECTION 14: Transport information

14.1 - 14.4 Not necessary

14.5 Environmental hazards

not necessary, contains only small quantities of hazardous substances

14.6 Special precautions for user

not necessary

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

not applicable

SECTION 15: Regulatory Information

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

German act governing protection from hazardous substances (Chemicals Act / Chemikaliengesetz- ChemG), revised on August 2013 German order governing protection from hazardous substances (Ordinance on Hazardous Substances / Gefahrstoffverordnung - GefStoffV), revised on November 2010, according to Directive 98/24/EC

TRGS 200, German engineering rules governing the classification and labelling of hazardous substances, preparations and products, updated October 2011

15.2 Chemical safety assessment

not necessary for these small amounts

SECTION 16: Other Information

16.1 List of R, H and P phrases

16.1.1 List of relevant R phrases

R42/43 May cause sensitization by inhalation and skin contact.

16.1.2 List of relevant H phrases

H317 May cause an allergic skin reaction.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

16.1.3 List of relevant P phrases

P261S Avoid breathing dust.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280sh Wear protective gloves/eye protection. P302+352 IF ON SKIN: Wash with plenty of water/

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

P333+313 If skin irritation or rash occurs: Get medical advice/attention.

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

P363 Wash contaminated clothing before reuse.

16.2 Training Advice

Multiple safety training of staffs about danger and protection by using hazards in working area. Additionally training and introduction of staffs for using these products.

16.3 Recommended Restriction on Use

Only for professional user.

Look about employee restrictions for young people (f. ex. 94/33/EC or DE § 22 JArbSchG)!

Look about employee restrictions for pregnant women and nursing women (f.ex. 92/85/EEC or DE §§ 4 und 5 MuSchRiV)! An individual package of this product or test kit has a moderate hazardous potential.

16.4 Further Information

Bioline Reagents Ltd provides the information contained herein in good faith being up-to-date of own realizations at revision time. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgement in determining its appropriateness for a particular purpose.

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16.5 Sources of Key Data

Regulation 453/2010/EU REACH - REQUIREMENTS FOR THE COMPILATION OF SAFETY DATA SHEETS

Regulation 487/2013/EU, 4th adaptation of CLP regulation to technical and scientific progress

TRGS 900, German engineering rules governing limits in air at work, updated February 2015

SUVA .CH, Limits in air at work 2009, revised on 01.2009

TRGS 907, German engineering rules governing listing of substances and causes of sensitizations, updated November 2011

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Merkblätter Gefährliche Arbeitsstoffe (Data Sheets of Hazardous Substances)

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