

Version: 202304

# **Material Safety Data Sheet**

# FavorPrep™ After Tri-Reagent RNA Clean-Up Kit

| Cat. No.:<br>Contents       | FAATR 000<br>(4 preps) | FAATR 001<br>(50 preps) | FAATR 001-1<br>(200 preps) |
|-----------------------------|------------------------|-------------------------|----------------------------|
| FARP Buffer                 | 1.8 ml                 | 30 ml                   | 80 ml                      |
| Wash Buffer 1               | 1.5 ml × 2             | 30 ml                   | 110 ml                     |
| Wash Buffer 2 (Concentrate) | 1.5 ml                 | 20 ml                   | 35 ml × 2                  |
| RNase-Free Water            | 1.5 ml                 | 6 ml                    | 12 ml                      |

Favorgen Biotech Corp.

Address: Ping-Tung Agricultural Biotechnology Park No. 8-1, Yuanxi 2<sup>nd</sup> Road, Ping Tung 908126, TAIWAN Phone Number: +886-8-762-1829 technical@favorgen.com www.favorgen.com

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# Section 1. IDENTIFICATION

#### 1.1 Product Identifier

Commercial Product Name: FARP Buffer

1.2 Relevant identified uses of the substance or mixture and uses advised against Product form: Laboratory chemical mixture/Binding Buffer

Relevant identified uses: For research use only, not for diagnostic use.

Uses advised against: -----

# 1.3 Details of the supplier of the safety data sheet

Company: Favorgen Biotech Corp. Address: Ping-Tung Agricultural Biotechnology Park No. 8-1, Yuanxi 2<sup>nd</sup> Road, Ping Tung 908126, TAIWAN Phone Number: +886-8-762-1829

1.4 Emergency telephone number

+886-8-762-1829

### Section 2. HAZARDS IDENTIFICATION

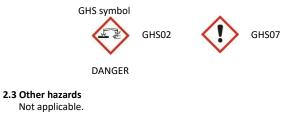
#### 2.2 Classification of the substance or mixture

| Hazard ident | Hazard identification Hazard classes/categories |             |  |
|--------------|---|-------------|--|
|              | Acute toxicity, oral, dermal and inhalation     | Category 4  |  |
|              | Skin corrosion                                  | Category 1C |  |
|              | Serious eye damage                              | Category 1  |  |

| GHS hazard pictograms:     | GHS02 GHS07   |
|----------------------------|---|
| Signal word: DANGER        |   |
| Hazard statement(s)        |   |
| H302+H312+H332             | Harmful if swallowed, in contact with skin or if inhaled.                     |
| H314                       | Causes severe skin burns and eye damage.                                      |
| H318                       | Causes serious eye damage.  |
| Precautionary statement(s) |   |
| P280                       | Wear protective gloves/protective clothing/eye protection/face<br>protection. |
| P301+P330+P331             | IF SWALLOWED: rinse mouth. Do NOT induce vomiting.                            |
| P302+P352                  | IF ON SKIN: Wash with plenty of soap and water.                               |
| P304+P340                  | IF INHALED: Remove person to fresh air and keep comfortable for breathing.    |
| P305+P351+P338             | IF INHALED: Remove person to fresh air and keep comfortable for breathing.    |
| P308+P311                  | IF exposed or concerned: Immediately call a POISON CENTER/doctor.             |

#### 2.2 Label elements

According to section 1.5.2 of Annex I to CLP



Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances or 3.2 Mixtures

According to Regulation (EC) No 1907/2006



| Chemical        | Guanidinium thiocyanate           | CAS No.: 593-84-0 |
|-----------------|-----------------------------------|-------------------|
| Concentration:  | 20~40%                            |                   |
| Classification: | H302+H312+H332, Acute oral Tox, 4 |                   |
|                 | H314, Skin corr., 1C              |                   |
|                 | H318, Eye Dam, 1                  |                   |
| Chemical        | Acetic acid                       | CAS No.: 64-19-7  |
| Concentration:  | 0.1~1%                            |                   |
| Classification: | H314, Skin corr., 1A              |                   |

Always wear recommended Personal Protective Equipment.

# Section 4. FIRST AID MEASURES

#### 4.1 Description of first-aid measures

If inhaled

After inhalation: Fresh air. If breathing stops: mouth-to-mouth breathing or artificial respiration. Oxygen if necessary. Immediately call in physician.

- In case of skin contact
- After skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower. In case of eye contact
- After eye contact: Rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses. If swallowed
- After swallowing: Immediately make victim drink water (two glasses at most). Consult a physician.

#### 4.2 Most important symptoms and effects, both acute and delayed

- Symptoms. Burning sensation. Note to physicians Treat symptomatically.
- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H318 Causes serious eye damage.
- **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: water foam carbon dioxide (CO2) dry powder; All extinguishers can be used.

5.2 Special hazards arising from the substance or mixture

# 5.3 Advice for firefighters

None known.

No specific fire or explosion hazard.

#### 5.4 Additional Information

#### Section 6. ACCIDENTAL RELEASE MEASURE

6.1 Personal precautions, protective equipment, and emergency procedures Do not breathe vapours/Ensure adequate ventilation/Avoid contact with skin, eyes or clothing/ Use personal protection equipment/Regular staff training is necessary.

#### 6.2 Environmental precautions

Do not allow mixture to enter ground water system.

6.3 Methods and material for containment and cleaning up Soak up with inert absorbent material.

#### 6.4 Reference to other sections

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Section 7. HANDLING AND STORAGE

According to Regulation (EC) No 1907/2006



#### 7.1 Precautions for safe handling

Always wear recommended Personal Protective Equipment.

**7.2 Conditions for safe storage, including any incompatibilities** Keep in a dry, cool, and well-ventilated place.

#### 7.3 Specific end use(s)

For research use only.

### Section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control parameters:

Ingredients with workplace control parameters Chemical: Acetic acid CAS No.: 64-19-7 NIOSH: REL (TWA) (mg/m<sup>3</sup>) 25 mg/m<sup>3</sup> NIOSH: REL (TWA) (ppm) 10 ppm NIOSH: REL (STEL) (mg/m<sup>3</sup>) 37.5 mg/m<sup>3</sup> NIOSH: REL (STEL) (ppm) 15 ppm

#### 8.2 Exposure controls

Good ventilation and exhaust system in the workplace, and the floor has drainage and washing facilities, which can resist the erosion of chemicals. Must maintain the highest level of cleanliness in the workplace.

#### Personal protective equipment

**Eye/face protection:** Safety glasses. Used to prevent splash hazards. Government standards such as NIOSH (US) or EN 166(EU). Safety glasses.

Skin protection: Recommended to avoid contamination with these hazards.

Hand protection: Protective gloves, Use for short times chemical resistant latex gloves with code EN 374-3 level 1.

Respiratory protection: Not necessary, if the workplace is well-ventilated.

**Personal Hygiene:** Wash hands before breaks and at the end of work. Handle in accordance with good industrial hygiene and safety practice.

### Section 9. PHYSICAL AND CHEMICAL PROPERTIES

- **9.1 Information on basic physical and chemical properties** Appearance: liquid/Odor: characteristic/pH: 4.0~5.0
- 9.2 Other information

### Section 10. STABILITY AND REACTIVITY

#### 10.1 Reactivity

No data available.

#### 10.2 Chemical stability

Decompositions are not observed during the expiration period under recommended conditions.

#### 10.3 Possibility of hazardous reactions

Note: Thiocyanates can develop poisonous gas in contact with strong acids. Keep away from oxidizing agents, and acidic or alkaline.

### 10.4 Conditions to avoid

Not necessary.

#### 10.5 Incompatible materials

Note: Avoid contact with strong acids or alkalines.

#### **10.6 Hazardous decomposition products**

Decompositions are not observed during the expiration period under recommended conditions.

#### Section 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

According to Regulation (EC) No 1907/2006



#### Acute toxicity

| Chemical Name                                | Oral LD50 (Rat) | Dermal LD50 (Rabbit) | Inhalation LC50 (Rat)                  |
|--|-----------------|----------------------|--|
| Guanidinium thiocyanate<br>CAS No.: 593-84-0 | 1,578 mg/kg     | 2,926 mg/kg          | 29.26 mg/l<br>Exposure time: 4 h/vapor |
| Acetic acid<br>CAS No.: 64-19-7              | 3310 mg/kg      | 1,016 mg/kg          | 11.4 mg/l                              |

Skin corrosion/irritation

Serious eye damage/irritation Respiratory or skin sensitization Germ cell mutagenicity Carcinogenicity Reproductive toxicity Specific target organ toxicity (STOT) – single exposure Specific target organ toxicity (STOT) – repeated exposure Aspiration hazard Causes skin irritation. Causes eye damage. Not Classified Not Classified Not Classified Not Classified May cause drowsiness or dizziness. Not Classified Not Classified

Harmful if swallowed.

11.2 Information on other hazards

No data available.

### Section 12. ECOLOGICAL INFORMATION

#### 12.1 Toxicity

Following information is valid for pure substances. Guanidinium thiocyanate CAS No.: 593-84-0LC50

Toxicity to fish: LC50 (Poecilia reticulata (guppy)): 89.1 mg/l Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia): 42.4 mg/l Exposure time: 48 h

Toxicity to fish (Chronic toxicity): NOEC (Poecilia reticulata (guppy)): 25 mg/l Exposure time: 96 d

# 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 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**12.6 Endocrine disrupting properties** No data available.

#### 12.7 Other adverse effects

No additional data available.

#### Section 13. DISPOSAL CONSIDERATIONS

# Refer to local regulations.

13.1 Waste treatment methods Dispose of contents/container in accordance with local regulation.

Empty containers should be taken to an approved waste handling site for recycling or disposal.

# Material Safety Data Sheet According to Regulation (EC) No 1907/2006



| Not dangerous goods IMDG: Not dangerous goods |
|---|
|   |
| IATA: -                                       |
| IATA: -                                       |
| larine pollutant: No IATA-DGR: No             |
|   |
|   |

Not Applicable.

### Further information

Not classified as dangerous in transport regulations.

### Section 15. REGULATIONS INFORMATION

- 15.1 Safety, health, and environmental regulations/legislation specific for the substance or mixture Look for your country-specific regulations.
- 15.2 Chemical safety assessment

Not necessary.

#### Section 16. REGULATIONS INFORMATION

- 16.1 List of R, H and P phrases Full text of H-Statements referred to under sections 2 and 3.
- 16.2 Training Advice

Regular safety training.

#### 16.3 Recommended Restriction on Use Only for professional/research user.

### Section 1. IDENTIFICATION

# 1.1 Product Identifier

Commercial Product Name: Wash Buffer 1

1.2 Relevant identified uses of the substance or mixture and uses advised against Product form: Laboratory chemical mixture

Relevant identified uses: For research use only, not for diagnostic use.

Uses advised against:

#### 1.3 Details of the supplier of the safety data sheet

Company: Favorgen Biotech Corp. Address: Ping-Tung Agricultural Biotechnology Park No. 8-1, Yuanxi 2nd Road, Ping Tung 908126, TAIWAN Phone Number: +886-8-762-1829

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#### 1.4 Emergency telephone number

+886-8-762-1829

# Section 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture Hazard ider

| ent | ntification Hazard classes/categories |            |  |
|-----|---------------------------------------|------------|--|
|     | Acute oral toxicity                   | Category 4 |  |
|     | Skin corrosion/irritation             | Category 2 |  |
|     | Serious eye damage/eye irritation     | Category 2 |  |

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GHS hazard pictograms:

|                            | GHS07   |
|----------------------------|---|
| Signal word: WARNING       | •   |
| Hazard statement(s)        |   |
| H302                       | Harmful if swallowed  |
| H315                       | Causes skin irritation  |
| H319                       | Causes serious eye irritation   |
| H412                       | Harmful to aquatic life with long lasting effects                           |
| Precautionary statement(s) |   |
| P264                       | Wash hands thoroughly after handling  |
| P270                       | Do not eat, drink or smoke when using this product                          |
| P273                       | Avoid release to the environment  |
| P280                       | Wear protective gloves/protective clothing/ eye protection/ face protectio  |
| P301 + P310                | IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician          |
| P302 + P352                | IF ON SKIN: Wash with plenty of 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                         |
| P330                       | Rinse mouth   |
| P332 + P313                | If skin irritation occurs: Get medical advice/attention                     |

#### 2.2 Label elements

According to section 1.5.2 of Annex I to CLP



Hazard contents

Guanidine hydrochloride, 36~50%, CAS-No. 50-01-1

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances or 3.2 Mixtures

Chemical: Guanidine hydrochloride Concentration: 36~50% Classification: H302, Acute oral Tox. 4, H315, Skin Irrit. 2, H319, Eye Irrit. 2

CAS No.: 50-01-1

Section 4. FIRST AID MEASURES

#### 4.1 Description of first-aid measures

If inhaled

After inhalation: fresh air. If breathing stops: mouth-to-mouth breathing or artificial respiration. Oxygen if necessary. Immediately call in physician.

According to Regulation (EC) No 1907/2006



#### In case of skin contact

- After skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower. In case of eye contact
- After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses. If swallowed
  - After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

#### 4.2 Most important symptoms and effects, both acute and delayed

- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H412 Harmful to aquatic life.
- 4.3 Indication of any immediate medical attention and special treatment needed No data available.

#### Section 5. FIRE-FIGHTING MEASURES

#### 5.1 Extinguishing media

All extinguishers can be used.

5.2 Special hazards arising from the substance or mixture None known.

#### 5.3 Advice for firefighters

No specific fire or explosion hazard.

- 5.4 Additional Information
  - ---

#### Section 6. ACCIDENTAL RELEASE MEASURE

**6.1 Personal precautions, protective equipment, and emergency procedures** Do not breathe vapours/Ensure adequate ventilation/Avoid contact with skin, eyes or clothing/Use personal protection equipment/Regular staff training is necessary.

#### 6.2 Environmental precautions

Do not allow mixture to enter ground water system.

**6.3 Methods and material for containment and cleaning up** Soak up with inert absorbent material.

#### 6.4 Reference to other sections

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# Section 7. HANDLING AND STORAGE

- 7.1 Precautions for safe handling
- Always wear recommended Personal Protective Equipment.
- 7.2 Conditions for safe storage, including any incompatibilities Keep in a dry, cool, and well-ventilated place.
- 7.3 Specific end use(s)

For research use only.

#### Section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters: None Chemical: Guanidine hydrochloride NIOSH: not listed OSHA: not listed

CAS No.: 50-01-1

According to Regulation (EC) No 1907/2006



#### 8.2 Exposure controls

Good ventilation and exhaust system in the workplace, and the floor has drainage and washing facilities, which can resist the erosion of chemicals. Must maintain the highest level of cleanliness in the workplace.

#### Personal protective equipment

**Eye/face protection:** Safety glasses. Used to prevent splash hazards. Government standards such as NIOSH (US) or EN 166(EU).

Skin protection: Recommended to avoid contamination with these hazards.

Hand protection: Protective gloves, use for short times chemical resistant latex gloves with code EN 374-3 level 1.

Respiratory protection: Not necessary, if the workplace is well-ventilated.

**Personal Hygiene:** Wash hands before breaks and at the end of work. Handle in accordance with good industrial hygiene and safety practice.

### Section 9. PHYSICAL AND CHEMICAL PROPERTIES

- 9.1 Information on basic physical and chemical properties
- Appearance: liquid/Color: clear/Odor: odorless/pH: 4.0~4.5

#### 9.2 Other information

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#### Section 10. STABILITY AND REACTIVITY

#### 10.1 Reactivity

No data available.

# 10.2 Chemical stability

No data available.

#### 10.3 Possibility of hazardous reactions

Note: Can form very reactive substances with oxidizing agents.

#### 10.4 Conditions to avoid

Not necessary.

#### 10.5 Incompatible materials

Note: Avoid contact with strong acids or alkalines.

#### 10.6 Hazardous decomposition products

Decompositions are not observed during the expiration period under recommended conditions.

#### Section 11. TOXICOLOGICAL INFORMATION

#### 11.1 Information on toxicological effects

Acute toxicity

Not Classified

| Chemical Name  | Oral LD50 (Rat) | Dermal LD50 (Rabbit)                      | Inhalation LC50 (Rat)   |
|--|-----------------|---|---|
| Guanidine hydrochloride<br>CAS No.: 50-01-1  | 475-907 mg/kg   | 2000 mg/kg                                | [4h] 3181-7655 μg/m³  |
| Skin corrosion/irritation<br>Serious eye damage/irritation<br>Respiratory or skin sensitization<br>Germ cell mutagenicity<br>Carcinogenicity<br>Reproductive toxicity<br>Specific target organ toxicity (STOT) – single exposure |                 | Not (<br>Not (<br>Not (<br>Not (<br>Not ( | irritation/Irritating to eyes<br>Classified<br>Classified<br>Classified<br>Classified<br>Classified<br>Classified<br>Classified |
| Specific target organ toxicity (STOT) – repeated exposure Aspiration hazard  |                 |   | Classified<br>Classified  |

11.2 Information on other hazards

No data available.

# Material Safety Data Sheet According to Regulation (EC) No 1907/2006



# Section 12. ECOLOGICAL INFORMATION

#### 12.1 Toxicity

Following information is valid for pure substances. Guanidine hydrochloride CAS No.: 50-01-1 LC50leuciscus idus/96h: 1759 mg/L WGK (DE): 1 WGK No.: 0788 Storage class (VCI): 12

#### 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 Results of PBT and vPvB assessment No data available.
- 12.6 Endocrine disrupting properties No data available.
- 12.7 Other adverse effects No data available.

#### Section 13. DISPOSAL CONSIDERATIONS

Refer to local regulations.

#### 13.1 Waste treatment methods

Dispose of contents/container in accordance with local regulation. Empty containers should be taken to an approved waste handling site for recycling or disposal.

# Section 14. TRANSPORT INFORMATION

| <b>14.1 UN number</b><br>ADR/RID: -                                 | IMDG: -                   | IATA: -                   |
|---|---------------------------|---------------------------|
| <b>14.2 UN proper shipping name</b><br>ADR/RID: Not dangerous goods | IMDG: Not dangerous goods | IMDG: Not dangerous goods |
| 14.3 Transport hazard class(es)<br>ADR/RID: -                       | IMDG: -                   | IATA: -                   |
| 14.4 Packaging group<br>ADR/RID: -                                  | IMDG: -                   | IATA: -                   |
| 14.5 Environmental hazards<br>ADR/RID: No                           | IMDG Marine pollutant: No | IATA-DGR: No              |
| 14.6 Special precautions for user None.                             |                           |                           |
| 14.7 Maritime transport in bulk accordin<br>Not Applicable.         | g to IMO instruments      |                           |
| Further information   |                           |                           |

Not classified as dangerous in transport regulations.



#### Section 15. REGULATIONS INFORMATION

- **15.1 Safety, health, and environmental regulations/legislation specific for the substance or mixture** Look for your country-specific regulations.
- 15.2 Chemical safety assessment

Not necessary.

#### Section 16. OTHER INFORMATION

**16.1 List of R, H and P phrases** Full text of H-Statements referred to under sections 2 and 3.

**16.2 Training Advice** Regular safety training.

# 16.3 Recommended Restriction on Use

Only for professional/research user.

# Section 1. IDENTIFICATION

#### 1.1 Product Identifier

Commercial Product Name: Wash Buffer 2

**1.2 Relevant identified uses of the substance or mixture and uses advised against** Product form: Laboratory chemical mixture

Relevant identified uses: For research use only, not for diagnostic use.

Uses advised against:

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#### 1.3 Details of the supplier of the safety data sheet

Company: Favorgen Biotech Corp. Address: Ping-Tung Agricultural Biotechnology Park No. 8-1, Yuanxi 2<sup>nd</sup> Road, Ping Tung 908126, TAIWAN Phone Number: +886-8-762-1829

#### 1.4 Emergency telephone number

+886-8-762-1829

#### Section 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

No hazardous substance as specified in Regulation (EC) No 1272/2008.

#### 2.2 Label elements

Does not need labelling as hazardous.

2.3 Other hazards

Not applicable.

#### Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances or 3.2 Mixtures

Chemical:chemicals/mixture < 1%,</th>no declaration necessaryCAS No.: -----Concentration:0.1 - <1%</td>

#### Section 4. FIRST AID MEASURES

4.1 Description of first-aid measures

According to Regulation (EC) No 1907/2006



If inhaled Supply fresh air. In case of skin contact Remove contaminated clothing. Rinse skin with water/shower. In case of eye contact Rinse out with plenty of water. If swallowed Consult a doctor if feeling unwell.

- **4.2 Most important symptoms and effects, both acute and delayed** No information available.
- **4.3 Indication of any immediate medical attention and special treatment needed** No information available.

### Section 5. FIRE-FIGHTING MEASURES

# 5.1 Extinguishing media

All extinguishers can be used.

- 5.2 Special hazards arising from the substance or mixture None.
- **5.3 Advice for firefighters** No explosion hazard.
- 5.4 Additional Information
  - ----

# Section 6. ACCIDENTAL RELEASE MEASURE

6.1 Personal precautions, protective equipment, and emergency procedures Ensure adequate ventilation.

#### 6.2 Environmental precautions Do not allow mixture to enter ground water system.

- 6.3 Methods and material for containment and cleaning up Soak up with inert absorbent material.
- 6.4 Reference to other sections

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# Section 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Always wear recommended Personal Protective Equipment.

- 7.2 Conditions for safe storage, including any incompatibilities Keep container tightly closed in a dry and well-ventilated place.
- 7.3 Specific end use(s)

For research use only.

#### Section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control parameters:

Contains no substances with occupational exposure limit.

#### 8.2 Exposure controls

- Personal protective equipment Personal Hygiene: Wash hands before breaks and at the end of work. Handle in accordance with good industrial hygiene and safety practice. Eye/face protection: Tight sealing safety glasses.
  - Hand protection: Protective gloves.



Respiratory protection: Not necessary, if the workplace is well-ventilated.

#### Section 9. PHYSICAL AND CHEMICAL PROPERTIES

- **9.1 Information on basic physical and chemical properties** Appearance: liquid/Color: clear/Odor: odorless/pH: 8.0~8.8
- 9.2 Other information

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# Section 10. STABILITY AND REACTIVITY

- 10.1 Reactivity None.
- **10.2 Chemical stability** No data available.
- **10.3 Possibility of hazardous reactions** None.
- **10.4 Conditions to avoid** Not necessary.
- 10.5 Incompatible materials

None.

#### 10.6 Hazardous decomposition products

Decompositions are not observed during the expiration period under recommended conditions.

Not Classified

Not Classified Not Classified

Not Classified

Not Classified Not Classified

Not Classified

Not Classified

Not Classified

Not Classified

#### Section 11. TOXICOLOGICAL INFORMATION

- 11.1 Information on toxicological effects Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitization Germ cell mutagenicity Carcinogenicity Reproductive toxicity Specific target organ toxicity (STOT) – single exposure Specific target organ toxicity (STOT) – repeated exposure Aspiration hazard
- 11.2 Information on other hazards
  - No data available.

### Section 12. ECOLOGICAL INFORMATION

#### 12.1 Toxicity

Contains no substances known to be hazardous to the ecosystem.

#### 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 Results of PBT and vPvB assessment

According to Regulation (EC) No 1907/2006



This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

No data available.

#### 12.7 Other adverse effects

No data available.

#### Section 13. DISPOSAL CONSIDERATIONS

Refer to local regulations.

#### 13.1 Waste treatment methods

Dispose of contents/container in accordance with local regulation.

Empty containers should be taken to an approved waste handling site for recycling or disposal.

#### Section 14. TRANSPORT INFORMATION 14.1 UN number ADR/RID: -IMDG: -IATA: -14.2 UN proper shipping name IMDG: Not dangerous goods IMDG: Not dangerous goods ADR/RID: Not dangerous goods 14.3 Transport hazard class(es) ADR/RID: -IMDG: -IATA: -14.4 Packaging group ADR/RID: -IMDG: -IATA: -14.5 Environmental hazards ADR/RID: No IMDG Marine pollutant: No IATA-DGR: No 14.6 Special precautions for user None. 14.7 Maritime transport in bulk according to IMO instruments Not Applicable. **Further information** Not classified as dangerous in transport regulations.

#### Section 15. REGULATIONS INFORMATION

- **15.1 Safety, health, and environmental regulations/legislation specific for the substance or mixture** Look for your country-specific regulations.
- 15.2 Chemical safety assessment

Not necessary.

#### Section 16. REGULATIONS INFORMATION

- 16.1 List of R, H and P phrases Full text of H-Statements referred to under sections 2 and 3.
- **16.2 Training Advice** Regular safety training.
- **16.3 Recommended Restriction on Use** Only for professional/research user.



#### Section 1. IDENTIFICATION

#### 1.1 Product Identifier

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

Product form: Laboratory chemical mixture

Commercial Product Name: RNase-Free Water

Relevant identified uses: For research use only, not for diagnostic use.

Uses advised against:

#### 1.3 Details of the supplier of the safety data sheet

Company: Favorgen Biotech Corp. Address: Ping-Tung Agricultural Biotechnology Park No. 8-1, Yuanxi 2<sup>nd</sup> Road, Ping Tung 908126, TAIWAN Phone Number: +886-8-762-1829

#### 1.4 Emergency telephone number

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#### Section 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

No hazardous substance as specified in Regulation (EC) No 1272/2008.

#### 2.2 Label elements

Does not need labelling as hazardous.

#### 2.3 Other hazards

Not applicable.

#### Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances or 3.2 Mixtures

- Chemical: Concentration:
- chemicals/mixture < 1%, no declaration necessary 0.1 <1%

CAS No.: ------

# Section 4. FIRST AID MEASURES

- 4.1 Description of first-aid measures
  - If inhaled
  - Supply fresh air.
  - In case of skin contact
    - Remove contaminated clothing. Rinse skin with water/shower.
  - In case of eye contact
  - Rinse out with plenty of water. If swallowed
    - Consult a doctor if feeling unwell.
- **4.2 Most important symptoms and effects, both acute and delayed** No information available.
- **4.3 Indication of any immediate medical attention and special treatment needed** No information available.

### Section 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

All extinguishers can be used.

- 5.2 Special hazards arising from the substance or mixture None.
- 5.3 Advice for firefighters



No explosion hazard.

### 5.4 Additional Information

#### Section 6. ACCIDENTAL RELEASE MEASURE

- 6.1 Personal precautions, protective equipment, and emergency procedures Ensure adequate ventilation.
- **6.2 Environmental precautions** Do not allow mixture to enter ground water system.
- 6.3 Methods and material for containment and cleaning up Soak up with inert absorbent material.

#### 6.4 Reference to other sections

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#### Section 7. HANDLING AND STORAGE

- 7.1 Precautions for safe handling Always wear recommended Personal Protective Equipment.
- 7.2 Conditions for safe storage, including any incompatibilities Keep container tightly closed in a dry and well-ventilated place.
- 7.3 Specific end use(s)

For research use only.

### Section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control parameters: Contains no substances with occupational exposure limit.

#### 8.2 Exposure controls

Personal protective equipment
Personal Hygiene: Wash hands before breaks and at the end of work. Handle in accordance with good industrial hygiene and safety practice.
Eye/face protection: Tight sealing safety glasses.
Hand protection: Protective gloves.
Respiratory protection: Not necessary, if the workplace is well-ventilated.

#### Section 9. PHYSICAL AND CHEMICAL PROPERTIES

- 9.1 Information on basic physical and chemical properties Appearance: liquid/ Color: Clear/ Odor: odorless/pH:4~5.5/Specific gravity: 1.0 g/cm<sup>3</sup>
- 9.2 Other information

# Section 10. STABILITY AND REACTIVITY

10.1 Reactivity None.

- **10.2 Chemical stability** No data available.
- **10.3 Possibility of hazardous reactions** None.

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FAVORGEN

# According to Regulation (EC) No 1907/2006

# 10.4 Conditions to avoid

Not necessary.

- 10.5 Incompatible materials
- None.
- 10.6 Hazardous decomposition products

Decompositions are not observed during the expiration period under recommended conditions.

### Section 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

- Not Classified Acute toxicity Skin corrosion/irritation Not Classified Serious eye damage/irritation Not Classified Not Classified Respiratory or skin sensitization Germ cell mutagenicity Not Classified Carcinogenicity Not Classified **Reproductive toxicity** Not Classified Specific target organ toxicity (STOT) - single exposure Not Classified Specific target organ toxicity (STOT) - repeated exposure Not Classified Aspiration hazard Not Classified
- 11.2 Information on other hazards
  - No data available.

### Section 12. ECOLOGICAL INFORMATION

#### 12.1 Toxicity

Contains no substances known to be hazardous to the ecosystem.

#### 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 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

#### 12.6 Endocrine disrupting properties

No data available.

12.7 Other adverse effects

No data available.

#### Section 13. DISPOSAL CONSIDERATIONS

Refer to local regulations.

#### 13.1 Waste treatment methods

Dispose of contents/container in accordance with local regulation.

Empty containers should be taken to an approved waste handling site for recycling or disposal.

# Section 14. TRANSPORT INFORMATION

14.1 UN number ADR/RID: -

IMDG: -

IATA: -

14.2 UN proper shipping name

# Material Safety Data Sheet According to Regulation (EC) No 1907/2006



| ADR/RID: Not dangerous goods                                | IMDG: Not dangerous goods            | IMDG: Not dangerous goods |
|---|--------------------------------------|---------------------------|
| <b>14.3 Transport hazard class(es)</b><br>ADR/RID: -        | IMDG: -                              | IATA: -                   |
| 14.4 Packaging group<br>ADR/RID: -                          | IMDG: -                              | IATA: -                   |
| <b>14.5 Environmental hazards</b><br>ADR/RID: No            | IMDG Marine pollutant: No            | IATA-DGR: No              |
| 14.6 Special precautions for user<br>None                   |                                      |                           |
| 14.7 Maritime transport in bulk accordi<br>Not Applicable.  | ng to IMO instruments                |                           |
| Further information<br>Not classified as dangerous in trans | port regulations.                    |                           |
| Section 15. REGULATIONS INFORMATION                         |                                      |                           |
| 15.1 Safety, health, and environmental                      | regulations/legislation specific for | the substance or mixture  |

Look for your country-specific regulations.

15.2 Chemical safety assessment Not necessary.

# Section 16. REGULATIONS INFORMATION

# 16.1 List of R, H and P phrases

Full text of H-Statements referred to under sections 2 and 3.

#### 16.2 Training Advice Regular safety training.

- 16.3 Recommended Restriction on Use
  - Only for professional/research user.