



## Safety Data Sheet

### pH Buffer 4

Version 1.0, Date of issue: 2026-08-03

#### SECTION 1: Identification

##### 1.1 GHS Product identifier

|                |             |
|----------------|-------------|
| Product name   | pH Buffer 4 |
| Product number | BUF4        |
| Brand          | Hurstchem   |

##### 1.3 Recommended use of the chemical and restrictions on use

Laboratory reagent

##### 1.4 Supplier's details

|           |                                                 |
|-----------|-------------------------------------------------|
| Name      | Hurst Scientific                                |
| Address   | 2 Transit Place, 6112 Forrestdale WA, Australia |
| Telephone | 1300 778 068                                    |
| email     | sales@hurstscientific.com.au                    |

##### 1.5 Emergency phone number

Australian Poisons Information Centre 13 11 26  
Australian Emergency Services 000

#### SECTION 2: Hazard identification

##### General hazard statement

Not classified as a Hazardous substance according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Classified as NON-Dangerous goods according to the ADG Code for the Transport of Dangerous Goods by Road and Rail (7th Edition).

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

###### GHS classification in accordance with: UN GHS revision 7

Not classified as hazardous under the WHS Regulations (UN GHS revision 7).

##### 2.2 GHS label elements, including precautionary statements

|             |                |
|-------------|----------------|
| Pictograms  | Not applicable |
| Signal word | Not applicable |

###### Hazard statement(s)

None.

###### Precautionary statement(s)

None.

##### 2.3 Other hazards

No information available on PBT / vPvB status or endocrine disrupting properties.

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## SECTION 3: Composition/information on ingredients

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### 3.2 Mixtures

#### Components

| Component                                    | Concentration |
|----------------------------------------------|---------------|
| Water (CAS: 7732-18-5)                       | 99%           |
| Potassium hydrogen phthalate (CAS: 877-24-7) | 1%            |

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## SECTION 4: First-aid measures

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### 4.1 Description of necessary first-aid measures

#### Eye contact

Flush eyes with copious amounts of water for at least 15 minutes. If irritation develops or persists, seek medical attention.

#### Skin contact

Remove contaminated clothing and wash affected area with soap and water thoroughly. If irritation develops, seek medical attention.

#### Inhalation

Evacuate to fresh air immediately. If unconscious, place in recovery position and provide artificial respiration if breathing ceases. Seek medical attention.

#### Ingestion

DO NOT induce vomiting. Wash mouth out with copious amounts of water and seek medical attention.

#### First-aid facilities

Eye wash station, safety shower and First Aid kit.

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

The most important symptoms and effects are described in Section 2 (hazard statements) and Section 11 (toxicological information).

### 4.3 Indication of immediate medical attention and special treatment needed

Treat symptomatically. For advice, contact the Poisons Information Centre (Australia 13 11 26; New Zealand 0800 764 766) or a doctor.

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## SECTION 5: Fire-fighting measures

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### 5.1 Suitable extinguishing media

Use an extinguishing medium suitable for the surrounding fire and other material involved. Water spray, dry chemical powder, carbon dioxide or foam.

### 5.2 Specific hazards arising from the chemical

The product will not burn or support combustion. Heating or fire may produce irritating or toxic gases, including oxides of carbon and potassium.

### 5.3 Special protective actions for fire-fighters

Fire fighters should wear self-contained breathing apparatus (SCBA) operated in positive-pressure mode and full protective clothing. Fight the fire from a safe location.

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## SECTION 6: Accidental release measures

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

Ensure adequate ventilation. Avoid contact with skin and eyes. Wear suitable protective equipment (see Section 8). Evacuate non-essential personnel from the area.

### 6.2 Environmental precautions

Prevent the spill from entering drains, sewers and waterways. In the event of a major spill, contain the material and notify the relevant authorities.

### 6.3 Methods and materials for containment and cleaning up

Contain the spill and prevent entry into drains, sewers and waterways. Absorb with inert absorbent material (e.g. sand, vermiculite or earth) and transfer to a suitable, labelled container for disposal. Rinse the affected area with water. Dispose of in accordance with Section 13.

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## SECTION 7: Handling and storage

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### 7.1 Precautions for safe handling

Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.

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

Store in a cool, dry, well-ventilated area. Keep containers tightly closed and upright when not in use. Store away from incompatible materials (see Section 10). Inspect containers regularly for damage or leaks.

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## SECTION 8: Exposure controls/personal protection

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### 8.1 Control parameters

**Water** (CAS: 7732-18-5)

AU/SWA (AU): No occupational exposure limit established.

**Potassium hydrogen phthalate** (CAS: 877-24-7)

AU/SWA (AU): No occupational exposure limit established.

### 8.2 Appropriate engineering controls

Ensure an adequate ventilation or exhaust system is in place.

### 8.3 Individual protection measures, such as personal protective equipment (PPE)

#### Eye/face protection

The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standard AS 1337 and be selected and used in accordance with AS 1336.

#### Skin protection

Clean impervious clothing should be worn. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

#### Hand protection

Use occupational protective gloves complying with AS 2161 (Selection, Use and Maintenance).

#### Respiratory protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapour/mist filter should be used. Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices.

## SECTION 9: Physical and chemical properties

### Basic physical and chemical properties

|                                                            |                            |
|------------------------------------------------------------|----------------------------|
| Physical state                                             | Liquid                     |
| Appearance                                                 | Clear or Coloured with Dye |
| Colour                                                     | No data available          |
| Odour                                                      | No data available          |
| Odour threshold                                            | No data available          |
| Melting point/freezing point                               | 0 °C                       |
| Boiling point or initial boiling point and boiling range   | 100°C                      |
| Flammability                                               | No data available          |
| Lower and upper explosion limit/flammability limit         | No data available          |
| Flash point                                                | No data available          |
| Explosive properties                                       | No data available          |
| Auto-ignition temperature                                  | No data available          |
| Decomposition temperature                                  | No data available          |
| Oxidising properties                                       | No data available          |
| pH                                                         | 4                          |
| Kinematic viscosity                                        | No data available          |
| Solubility                                                 | Water Soluble              |
| Partition coefficient n-octanol/water (log value)          | No data available          |
| Vapour pressure                                            | No data available          |
| Evaporation rate                                           | No data available          |
| Density and/or relative density                            | 1 g/mL                     |
| Relative vapour density                                    | No data available          |
| Particle characteristics                                   | No data available          |
| Supplemental information regarding physical hazard classes | No data available          |
| Further safety characteristics (supplemental)              | No data available          |

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Stable under normal conditions of storage and handling.

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

None under normal use conditions.

### 10.4 Conditions to avoid

Avoid storing in direct sunlight and avoid extremes of temperature.

### 10.5 Incompatible materials

Strong oxidising agents, strong acids, strong bases.

### 10.6 Hazardous decomposition products

Thermal decomposition or combustion may produce oxides of carbon and potassium.

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## SECTION 11: Toxicological information

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### Information on toxicological effects

#### Acute toxicity

>3200 mg/kg (rat, LD50 oral) (Potassium hydrogen phthalate); Dermal LD<sub>50</sub>: >1 g/kg (guinea pig, LD50 skin) (Potassium hydrogen phthalate)

#### Skin corrosion/irritation

Not expected to be a skin irritant.

#### Serious eye damage/irritation

Not expected to be an eye irritant.

#### Respiratory or skin sensitisation

Not expected to be a respiratory or skin sensitiser.

#### Germ cell mutagenicity

Not considered to be a mutagenic hazard.

#### Carcinogenicity

Not considered to be a carcinogenic hazard.

#### Reproductive toxicity

Not considered to be toxic to reproduction.

#### Specific target organ toxicity (STOT) - single exposure

Not expected to cause toxicity to a specific target organ.

#### Specific target organ toxicity (STOT) - repeated exposure

Not expected to cause toxicity to a specific target organ through repeated exposure.

#### Aspiration hazard

Not expected to be an aspiration hazard.

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## SECTION 12: Ecological information

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### Toxicity

No data available

### Persistence and degradability

No data available

### Bioaccumulative potential

No data available

### Mobility in soil

No data available

### Results of PBT and vPvB assessment

No data available

### Endocrine disrupting properties

No data available

### Other adverse effects

No data available

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## SECTION 13: Disposal considerations

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### Product disposal

Dispose of in accordance with local authority guidelines.

### Packaging disposal

Dispose of in accordance with local authority guidelines.

### Waste treatment

Dispose of in accordance with local authority guidelines.

### Sewage disposal

Do not contaminate drains and waterways.

### Other disposal recommendations

Nil.

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## SECTION 14: Transport information

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### ADG (Australian Dangerous Goods Code, 7th Edition)

Not classified as dangerous goods according to the ADG Code for the Transport of Dangerous Goods by Road and Rail (7th Edition).

### IMDG (International Maritime Dangerous Goods Code)

Not classified as dangerous goods according to the IMDG Code.

### IATA (International Air Transport Association Dangerous Goods Regulations)

Not classified as dangerous goods according to the IATA Dangerous Goods Regulations.

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## SECTION 15: Regulatory information

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### 15.1 Safety, health and environmental regulations specific for the product in question

#### Water (CAS: 7732-18-5)

Australia SUSMP — Poison Schedule: Not Scheduled (NS)

#### Potassium hydrogen phthalate (CAS: 877-24-7)

Australia SUSMP — Poison Schedule: Not Scheduled (NS)

### 15.2 Chemical safety assessment

No chemical safety assessment has been carried out for this product.

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## SECTION 16: Other information

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### 16.1 Further information/disclaimer

#### References

1. Safe Work Australia, Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice, (June 2023).
2. Safe Work Australia, National Code of Practice for the Labelling of Workplace Hazardous Chemicals (2015).
3. Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants (2013).
4. National Transport Commission Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code), Volume 1, Edition 7.9 (2023).
5. Standards Australia, Dangerous Goods Initial Emergency Response Guide: Australian Handbook (SAA/SNZ HB76); Homebush (2004).

### 16.2 Preparation information

This SDS is prepared in accordance with the Safe Work Australia, Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice, (June 2023). The information contained within is believed to be accurate at the date of preparation/review. Hurst Scientific makes no claims of the accuracy or completeness of the information and excludes all liability for any loss or damage related to the supply or use of the information in this safety data sheet. It is recommended the user make their own determinations as to the suitability of the information provided to the application in which the product is to be used. Copyright © 2026 Hurst Scientific