

## Safety Data Sheet PERIODIC ACID 50% Solution

SDS no. 42RU1Q8Y • Version 1.0 • Date of issue: 2026-03-03

### SECTION 1: Identification

#### GHS Product identifier

Product name PERIODIC ACID 50% Solution

Product number PER50

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

Laboratory reagent.

#### Supplier's details

Name ChemSupply Australia Pty Ltd  
Address 38-50 Bedford Street  
5013 Gillman South Australia  
Australia

Telephone 08 8440 2000  
email [www.chemsupply.com.au](http://www.chemsupply.com.au)

#### National contact

Name Australian Biostain Pty Ltd  
Address 16 Shipwright Road  
5016 Largs North SA  
Australia

#### Emergency phone number

CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)

### SECTION 2: Hazard identification

#### General hazard statement

Dangerous goods of Class 5.1 (Oxidizing Agent) are incompatible in a placard load with any of the following:  
Class 1, Class 2.1, Class 2.3, Class 3, Class 4, Class 5.2, Class 7, Class 8, Fire risk substances and Combustible liquids.

Classified as dangerous goods according to the Australian Dangerous Goods Code (ADG).

Classified as Hazardous according to the Globally Harmonised System of classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

#### Classification of the substance or mixture

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

- Acute toxicity, oral, Cat. 4
- Serious eye damage/eye irritation, Cat. 1
- Corrosive to metals, Cat. 1



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| Component | Identification                          | Weight % |
|-----------|-----------------------------------------|----------|
| Water     | CAS no.: 7732-18-5<br>EC no.: 231-791-2 | 50 %     |

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## SECTION 4: First-aid measures

### Description of necessary first-aid measures

|                         |                                                                                                                                                                                                                             |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General advice          | First Aid Facilities: Maintain eyewash fountain in work area.                                                                                                                                                               |
| If inhaled              | If inhaled, remove from contaminated area to fresh air immediately. Apply artificial respiration if not breathing. If breathing is difficult, give oxygen. Immediately obtain medical aid if cough or other symptoms appear |
| In case of skin contact | Wash affected areas with copious quantities of water immediately. Remove contaminated clothing and wash before re-use. Seek medical attention.                                                                              |
| In case of eye contact  | Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. Obtain medical attention immediately.                                                                                 |
| If swallowed            | Rinse mouth thoroughly with water immediately, repeat until all traces of product have been removed. DO NOT INDUCE VOMITING. Seek immediate medical advice.                                                                 |

### Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### Indication of immediate medical attention and special treatment needed, if necessary

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

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## SECTION 5: Fire-fighting measures

### Suitable extinguishing media

Small fire: Use flooding quantities of water. DO NOT use dry chemical, CO2 or foam.

If safe to do so, move undamaged containers from the fire area. DO NOT move cargo if cargo has been exposed to heat.

Large fire: Flood fire area with water from a protected position.

Cool containers with flooding quantities of water until well after the fire is out. If possible, withdraw from area and let it burn. Avoid getting water inside the containers; a violent reaction may occur. Dam fire control water for later disposal.

### Specific hazards arising from the chemical

Will accelerate burning when involved in a fire. May explode on heating, shock, friction or contamination. Some will react explosively with hydrocarbons (fuels). May ignite combustibles (wood, paper, clothing, etc). Fire may produce irritating, poisonous, and/or corrosive gases. Containers may explode on heating. Runoff may create fire or explosion hazard.

### Special protective actions for fire-fighters

Wear SCBA and chemical splash suit. Structural firefighter's uniform will provide limited protection.

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## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.

### Methods and materials for containment and cleaning up

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Do not contaminate. Keep combustibles (wood, paper, clothing, oil, etc.) away from the spilled material. Do NOT touch damaged containers or spilled material unless wearing appropriate protective clothing. Use water spray to knock down vapours or divert vapour clouds. Prevent entry into waterways, drains or confined areas. Prevent exposure to heat.

Small Liquid Spill: Use a non-combustible material like vermiculite, sand or earth to soak up the product and place in a loosely-covered container for later disposal.

Large Liquid Spill: SEEK EXPERT ADVICE ON HANDLING AND DISPOSAL.

**SECTION 7: Handling and storage**

**Precautions for safe handling**

Do not eat, drink or smoke when using this product. Eye wash facilities and emergency shower must be available when handling this product. Good personal hygiene procedures should be implemented. Take off contaminated clothing and wash it before reuse. Wash promptly with soap and water if skin becomes contaminated.

**Conditions for safe storage, including any incompatibilities**

Store in a cool, dry place. Store away from combustible materials. Keep containers closed at all times.

**SECTION 8: Exposure controls/personal protection**

**Appropriate engineering controls**

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.

**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 Standards 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.

**Body protection**

Footwear: Safety boots in industrial situations is advisory, foot protection should comply with AS 2210, Occupational protective footwear - Guide to selection, care and use.

Body Protection: Clean clothing or protective clothing should be worn, preferably with an apron. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

**Respiratory protection**

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/ mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements. 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, in order to make any necessary changes for individual circumstances.

**SECTION 9: Physical and chemical properties**

**Basic physical and chemical properties**

|                |        |
|----------------|--------|
| Physical state | Liquid |
| Appearance     |        |

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|                                                          |                                                    |
|----------------------------------------------------------|----------------------------------------------------|
| Color                                                    | Clear, colorless to pale yellow                    |
| Odor                                                     | Nil                                                |
| Odor threshold                                           |                                                    |
| Melting point/freezing point                             | n/d                                                |
| Boiling point or initial boiling point and boiling range | 110-14 °C                                          |
| Flammability                                             | Not flammable                                      |
| Lower and upper explosion limit/ flammability limit      | n/d                                                |
| Flash point                                              | n/a                                                |
| Auto-ignition temperature                                | n/a                                                |
| Decomposition temperature                                | n/d                                                |
| Oxidizing properties                                     | Oxidiser Category 2                                |
| pH                                                       | <1                                                 |
| Kinematic viscosity                                      | n/d                                                |
| Solubility                                               | Solubility in Water: Completely miscible in water. |
| Partition coefficient n-octanol/ water (log value)       | n/d                                                |
| Vapor pressure                                           | n/d                                                |
| Density and/or relative density                          | Density: 1.65 g/cm <sup>3</sup> @ 20 °C            |
| Relative vapor density                                   | n/d                                                |
| Particle characteristics                                 | n/a                                                |

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## SECTION 10: Stability and reactivity

### Reactivity

Stable under normal conditions of storage and handling.

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

May corrode metals. Will produce toxic gases on contact with cyanides, sulphides etc.

May contribute to the intensity of a fire

Hazardous Polymerization: Will not occur.

### Conditions to avoid

Store out of direct light.

### Incompatible materials

Combustible material, reducing agents, strong bases, powdered metals and dimethyl sulfoxide.

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#### Hazardous decomposition products

Toxic fumes of iodides.

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## SECTION 11: Toxicological information

### Information on toxicological effects

#### Acute toxicity

Ingestion: May cause gastro-intestinal inflammation and possibly fatty metamorphosis of the liver. Causes severe burns to soft mucous tissue.

Inhalation: Causes severe burns to soft mucous tissue.

#### Skin corrosion/irritation

Causes severe skin burns. Corrosive to skin. The symptoms may include redness, itching and swelling, irritation, severe pain and chemical burns with resultant skin/tissue destruction.

#### Serious eye damage/irritation

Causes serious eye damage. Eye contact will cause stinging, blurring, tearing, severe pain and chemical burns, resulting in possible blindness.

#### Respiratory or skin sensitization

Not classified based on available information.

#### Germ cell mutagenicity

Not classified based on available information.

#### Carcinogenicity

Not classified based on available information.

#### Reproductive toxicity

Not classified based on available information.

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

Not classified based on available information.

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

Not classified based on available information.

#### Aspiration hazard

Not classified based on available information.

#### Additional information

Chronic Effects: Prolonged absorption of iodides may cause skin rash, running nose, headache and irritation of mucous membranes. In severe cases, the skin may show pimples, boils, redness, black and blue spots, hives and blisters. Weakness, anaemia, loss of weight and general depression may occur.

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## SECTION 12: Ecological information

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## SECTION 13: Disposal considerations

### Disposal methods

#### Product disposal

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers.

#### Other disposal recommendations

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Do not discharge this material into waterways, drains and sewers.

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## SECTION 14: Transport information

### ADG (Road and Rail)

UN Number: 3098

Class: 5.1, 8

Packing Group: II

Proper Shipping Name: OXIDIZING LIQUID, CORROSIVE, N.O.S. (Contains Periodic Acid 50%)

### Hazchem emergency action code (EAC)

2W

### IMDG

UN Number: 3098

Class: 5.1, 8

Packing Group: II

Proper Shipping Name: OXIDIZING LIQUID, CORROSIVE, N.O.S. (Contains Periodic Acid 50%)

### IATA

UN Number: 3098

Class: 5.1, 8

Packing Group: II

Proper Shipping Name: OXIDIZING LIQUID, CORROSIVE, N.O.S. (Contains Periodic Acid 50%)

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## SECTION 15: Regulatory information

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

#### Australia SUSMP

Poison Schedule: NS

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## SECTION 16: Other information

### Further information/disclaimer

ChemSupply Australia Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon ChemSupply Australia Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of ChemSupply Australia Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

### Preparation information

All information provided in this data sheet or by our technical representatives is compiled from the best knowledge available to us. However, since data, safety standards and government regulations are subject to change and the conditions of handling and use, or misuse, are beyond our control, we make no warranty either expressed or implied, with respect to the completeness or accuracy to the information contained herein. ChemSupply Australia Pty Ltd accepts no responsibility whatsoever for its accuracy or for any results that may be obtained by customers from using the data and disclaims all liability for reliance on information provided in this data sheet or by our technical representatives.

Standard for the Uniform Scheduling of Medicines and Poisons, Commonwealth of Australia

National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.'

Safe Work Australia, 'National Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals', July 2020.

Safe Work Australia, 'National Guide for Classifying Hazardous Chemicals', July 2020.

Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants, December 2019

Safe Work Australia, Hazardous Chemical Information System (HCIS), [hcis.safeworkaustralia.gov.au](https://hcis.safeworkaustralia.gov.au)

IATA, Dangerous Goods Regulations (DGR)

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IMO, International Maritime Dangerous Goods Code (IMDG)