



Safety Data Sheet Periodic Acid Powder

SECTION 1: Identification

Product name Periodic Acid Powder

Product number PER-25G, PER-100G, PER-
Brand Hurstchem

Recommended use of the chemical and restrictions on use

Laboratory Reagent

Supplier's details

Name Hurst Scientific
Address 2/36 Hensbrook Loop
6112 Forrestdale WA
Australia

Telephone 1300 778 068
email sales@hurstscientific.com.au

Emergency phone number

Australian Poisons Information Centre 131 126
Australian Emergency Services 000

SECTION 2: Hazard identification

General hazard statement

Classified as a **Hazardous substance** according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Classification of the substance or mixture

- Oxidizing solids, Cat. 1
- Skin corrosion/irritation, Cat. 1B
- Eye damage/irritation, Cat. 1
- Specific target organ toxicity (repeated exposure), Cat. 1

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GHS label elements, including precautionary statements.

Pictograms



1. Flame; 2. Flame over circle; 3. Corrosion; 4. Health hazard

Signal word

Danger

Hazard statement(s)

| | |
|------|---|
| H260 | In contact with water releases flammable gases which may ignite spontaneously. |
| H271 | May cause fire or explosion, strong oxidizer. |
| H314 | Causes severe skin burns and eye damage. |
| H318 | Causes serious eye damage. |
| H372 | Causes damage to organs [organs] through prolonged or repeated exposure [route] |

Precautionary statement(s)

| | |
|----------------|---|
| P210 | Keep away from heat/sparks/open flames/hot surfaces. No smoking. |
| P220 | Keep/Store away from clothing/.../combustible materials. |
| P221 | Take any precaution to avoid mixing with combustibles/... |
| P223 | Do not allow contact with water. |
| P231+P232 | Handle under inert gas. Protect from moisture. |
| P260 | Do not breathe dust/fume/gas/mist/vapours/spray. |
| P264 | Wash ... thoroughly after handling. |
| P270 | Do not eat, drink, or smoke when using this product. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P283 | Wear fire/flammable resistant/retardant clothing. |
| P301+P330+P331 | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. |
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. |
| P306+P360 | IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. |
| P310 | Immediately call a POISON CENTER/doctor/... |
| P314 | Get medical advice/attention if you feel unwell. |
| P321 | Specific treatment (see ... on this label). |
| P335+P334 | Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages. |
| P363 | Wash contaminated clothing before reuse. |
| P370+P378 | In case of fire: Use ... to extinguish. |
| P371+P380+P375 | In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion. |
| P402+P404 | Store in a dry place. Store in a closed container. |
| P405 | Store locked up. |
| P501 | Dispose of contents/container to ... |

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SECTION 3: Composition/information on ingredients

Mixtures

1. Periodic acid

| | |
|---------------|------------|
| Concentration | < 100 % |
| CAS no. | 10450-60-9 |

SECTION 4: First-aid measures

Description of necessary first-aid measures

| | |
|-------------------------|--|
| If inhaled | Evacuate to fresh air immediately. If unconscious place in recovery position, provide artificial respiration if breathing ceases. Do not use mouth to mouth technique. |
| In case of skin contact | Remove contaminated clothing and wash affected area with soap and water thoroughly. Seek medical attention. |
| In case of eye contact | Flush eyes with copious amounts of water for at least 15 minutes. Seek immediate medical attention. |
| If swallowed | DO NOT induce vomiting. Rinse mouth out with water. Seek immediate medical attention. Do not attempt to neutralise. |

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

Treat symptomatically.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Use media suitable for other material involved in fire.

Specific hazards arising from the chemical.

Toxic gases may evolve.

Special protective actions for fire-fighters

Wear SCBA (Self-Contained Breathing Apparatus) and full protective equipment.

Further information

Hazchem code 1W

SECTION 6: Accidental release measures

Personal precautions, protective equipment, and emergency procedures

Remove all sources of ignition. Wear appropriate protective clothing. Ensure adequate ventilation and avoid contact with skin and eyes. If possible, contain the spill. Evacuate all unnecessary personnel.

Methods and materials for containment and cleaning up.

Sweep up and then collect in a suitable container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

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SECTION 7: Handling and storage

Precautions for safe handling

Wear appropriate protective equipment and avoid exposure. Ensure area is adequately ventilated and practice good personal hygiene. Avoid contact with skin and eyes. Avoid dust generation. Keep away from sources of ignition.

Conditions for safe storage, including any incompatibilities.

Store in a cool, dry, well-ventilated area out of direct sunlight. Avoid heat, sparks, flames, and other ignition sources. Store away from incompatibles. Keep containers tightly closed when not in use.

SECTION 8: Exposure controls/personal protection

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

Respiratory protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirators when necessary.

Respiratory protection

| | |
|-------------------------------|--|
| National exposure standards | Not available for this product. |
| Biological Limit Values | Not available for this product. |
| Engineering Controls | Ensure adequate ventilation is provided. |
| Personal Protective Equipment | Safety glasses or goggles, chemical-resistant gloves, and laboratory coat. |

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

| | |
|--|----------------------------------|
| Physical state | Solid |
| Appearance | Colourless, crystalline powder |
| Odor | Odourless |
| Melting point/freezing point | 122°C |
| Boiling point or initial boiling point and boiling range | Not available |
| Flammability | Non-combustible |
| Lower and upper explosion limit/flammability limit | Not applicable |
| pH | Not available |
| Solubility | Water and Ethanol soluble @ 20°C |
| Vapor pressure | Not available |
| Density and/or relative density | Not available |
| Relative vapor density | Not available |

SECTION 10: Stability and reactivity

Reactivity

Non-reactive under recommended conditions for use and storage.

Chemical stability

Stable under recommended conditions for use and storage.

Possibility of hazardous reactions

Polymerisation not expected to occur.

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Conditions to avoid.

Incompatibles, hygroscopic and extreme temperatures.

Incompatible materials

Strong oxidising agents and strong bases, reducing agents, organic compounds, powdered metals, and Dimethyl Sulfoxide (DMSO).

Hazardous decomposition products

Toxic (corrosive) gases may evolve – Hydrogen Iodide.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

No data available.

Skin corrosion/irritation

No classification available.

Serious eye damage/irritation

Causes serious eye damage.

Respiratory or skin sensitization

No data available.

Germ cell mutagenicity

No data available.

Carcinogenicity

Not classified by the IARC.

Reproductive toxicity

No data available.

Specific target organ toxicity (STOT) - single exposure.

No data available.

Specific target organ toxicity (STOT) - repeated exposure.

Causes damage to organs (Thyroid) with prolonged/repeated exposure.

Aspiration hazard

No data available.

Additional information

Material is extremely destructive to tissue of the mucous membranes, eyes, skin and upper respiratory tract. Can cause cough, shortness of breath, headache, nausea, dizziness, and vomiting.

SECTION 12: Ecological information

Toxicity

Very toxic to aquatic life.

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Bioaccumulate potential

Not expected to bio-accumulate.

Mobility in soil

Not available for this product.

Other adverse effects

Do not contaminate drains and waterways.

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Dispose of in accordance with local authority guidelines.

Other disposal recommendations

Nil.

SECTION 14: Transport information

| | |
|----------------------------|---|
| UN Number | 3085 |
| UN Proper Shipping Name | Oxidising Solid, Corrosive, N.O.S. (Orthoperiodic acid) |
| Transport hazard class(es) | 8, 5.1 |
| Packing group | II |

Special precautions for user

Division 5.1 Dangerous Goods are incompatible in a placard load with any of the following: - Class 1, Explosives - Division 2.1, Flammable Gases - Division 2.3, Toxic Gases - Class 3, Flammable Liquids - Division 4.1, Flammable Solids - Division 4.2, Spontaneously Combustible Substances - Division 4.3, Dangerous When Wet Substances - Some Division 5.1 Oxidising substances (Refer Table 9.2) - Division 5.2, Organic Peroxides - Class 6, Toxic and Infectious Substances, if the Class 6 substance is a fire risk substance - Class 7, Radioactive Substances - Class 8, Corrosive Substances - Class 9, Miscellaneous Dangerous Goods, if the Class 9 substance is a fire risk substance - Fire risk substances - Combustible liquids

SECTION 15: Regulatory information

Chemical Safety Assessment

- Poison Schedule: Not scheduled.

SECTION 16: Other information

Preparation information

References

1. Safe Work Australia, Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice, (2011).
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); Can print: Canberra (2007), Volume 1, 7th Edition.
5. Standards Australia, Dangerous Goods Initial Emergency Response Guide: Australian Handbook (SAA/SNZ HB76); Homebush (2004).

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Further information/disclaimer

This SDS is prepared in accordance with the Safe Work Australia, Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice, (2011). 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 material 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 © 2022 Hurst Scientific