Infosafe No™ 3CHP6 Issue Date :March 2021 RE-ISSUED by AMBERSCI

Product Name **PERIODIC ACID 50% Solution**

Classified as hazardous

1. Identification

GHS Product Identifier	PERIODIC ACID 50% Solution
Product Code	PER50
Company Name	AMBER SCIENTIFIC PTY LTD
Address	24 - 28 Stratton Drive Traralgon Victoria 3844 Australia
Telephone/Fax Number	Tel: (03) 5176 2855
Emergency phone number	CHEMCALL (24 hours): 1800 127 406 (Australia) / +64-4-917-98888 (International)
Recommended use of the chemical and restrictions on use	Laboratory reagent.
Other Information	Amber Scientific 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 Amber Scientific 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 Amber Scientific 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.

2. Hazard Identification

GHS classification of the substance/mixture	This product is classified as HAZARDOUS according to Approved Criteria for Classifying Hazardous Substances [NOSHC:1008] and/or list of Designated Hazardous Substances [NOHSC:10005] and the Hazardous Substances Information System [HSIS] Worksafe Australia May 2014. This product is classified as a DANGEROUS GOODS according to the Australian Code for the Transport and Storage of Dangerous Goods by Road and Rail Oxidizing Solids: Category 2 Skin Corrosion/Irritation: Category 1A Eye Damage/Irritation: Category 1 Corrosive to Metals: Category 1
Signal Word (s)	DANGER
Hazard Statement (s)	H272 May intensify fire: oxidiser. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H290 May be corrosive to metals.
Pictogram (s)	Flame over circle, Corrosion

Precautionary statement – Prevention	P210 Keep away from heat. P220 Keep/ Store away from clothing and other combustible materials. P221 Take any precaution to avoid mixing with combustibles. P234 Keep only in original container. P260 Do not breathe dust/fume/gas/mist/vapours/spray. P264 Wash thoroughly after handling. P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement – Response	P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P363 Wash contaminated clothing before reuse. P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P310 Immediately call a POISON CENTER or doctor/physician. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor/physician. P370+P378 In case of fire: Use Use flooding quantities of water for extinction. P390 Absorb spillage to prevent material damage.
Precautionary statement – Storage	P405 Store locked up. P406 Store in corrosive resistant/ ... container with a resistant inner liner.
Precautionary statement – Disposal	P501 Dispose of contents/container to an approved waste disposal plant.

3. Composition/information on ingredients

Ingredients	Name	CAS	Proportion
	Periodic acid	10450-60-9	50 %
	Water to make a total of 100%	7732-18-5	

4. First-aid measures

Inhalation	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.
Ingestion	Rinse mouth thoroughly with water immediately, repeat until all traces of product have been removed. DO NOT INDUCE VOMITING. Seek immediate medical advice.
Skin	Wash affected areas with copious quantities of water immediately. Remove contaminated clothing and wash before re-use. Seek medical attention.
Eye contact	Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. Obtain medical attention immediately.
First Aid Facilities	Eye wash fountains and safety showers should be available for emergency use.
Advice to Doctor	Treat symptomatically based on judgement of doctor and individual reactions of the patient.
Other Information	For advice, contact a Poisons Information Centre (Phone eg Australia 13 1126; New Zealand 0800 764 766) or a doctor.

5. Fire-fighting measures

Specific Methods	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.
Hazchem Code	2W
Precautions in connection with Fire	Wear SCBA and chemical splash suit. Structural firefighter's uniform will provide limited protection.

6. Accidental release measures

Spills & Disposal
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.

Personal Precautions
Follow precautions for safe handling described in this safety data sheet. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Keep unnecessary and unprotected personnel away from the spillage. Treat the spilled material according to the instructions in the clean-up section.

Personal Protection
Use personal protective equipment listed in Section 8.

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.
Avoid generating and inhaling dust.

Conditions for safe storage, including any incompatibilities
Store in a cool,dry place. Store away from combustible materials. Keep containers closed at all times.

Storage Regulations
Refer Australian Standard AS 4326-1995 'The storage and handling of oxidizing agents'. Refer Australian Standard AS 3780-2008 'The storage and handling of corrosive substances'.

8. Exposure controls/personal protection

Other Exposure Information
No exposure standards have been established for this product by Safe Work Australia, however, the TWA exposure standard for dusts/mists not otherwise specified is 10 mg/m3. All atmospheric contamination should be kept to as low a level as is workable.
All atmospheric contamination should be kept to as low a level as is workable. Workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.
The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week.

Appropriate engineering controls
Maintain the concentrations values below the TWA. This may be achieved by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods.

Respiratory Protection
Where ventilation is not adequate, respiratory protection may be required. Avoid breathing vapours or mists. Select and use respirators in accordance with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. When mists or vapours exceed the exposure standards then the use of the following is recommended: Approved respirator with organic vapour and dust/mist filters. Filter capacity and respirator type depends on exposure levels.

Eye Protection
Eye 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.

Hand Protection
Wear gloves of impervious material conforming to AS/NZS 2161: Occupational protective gloves - Selection, use and maintenance. Final choice of appropriate glove type will vary according to individual circumstances. This can include methods of handling, and engineering controls as determined by

	appropriate risk assessments. Avoid skin contact when removing gloves from hands, do not touch the gloves outer surface. Dispose of gloves as hazardous waste.
Personal Protective Equipment	Personal protective equipment should not solely be relied upon to control risk and should only be used when all other reasonably practicable control measures do not eliminate or sufficiently minimise risk. Guidance in selecting personal protective equipment can be obtained from Australian, Australian/New Zealand or other approved standards.
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	Wear anti-static protective clothing if there is a risk of ignition from static electricity. Clean impervious clothing should be worn. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.
Hygiene Measures	Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

9. Physical and chemical properties

Appearance	Clear, colorless to pale yellow liquid.
Boiling Point	110-14 °C
Solubility in Water	Completely soluble in water.
pH	<1
Density	1.65 g/cm3 @ 20 °C
Flammability	Not combustible but assists combustion of other substances.

10. Stability and reactivity

Chemical Stability	Stable under normal use conditons.
Conditions to Avoid	Store out of direct light.
Incompatible Materials	Combustible material, reducing agents, strong bases, powdered metals and dimethyl sulfoxide.
Hazardous Decomposition Products	Toxic fumes of iodides.
Hazardous Polymerization	Will not occur.

11. Toxicological Information

Ingestion	May cause gastro-intestinal inflammation and possibly fatty metamorphosis of the liver. Causes servere burns to soft mucous tissue.
Inhalation	Causes servere burns to soft mucous tissue.
Skin	Causes burns.
Eye	Causes burns.
Respiratory sensitisation	Not classified based on available information.
Skin Sensitisation	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.

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STOT-single exposure	Not classified based on available information.
STOT-repeated exposure	Not classified based on available information.
Aspiration Hazard	Not classified based on available 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.
Serious eye damage/irritation	Eye Damage/Irritation: Category 1 H318 Causes serious eye damage.
Skin corrosion/irritation	Skin Corrosion/Irritation: Category 1A H314 Causes severe skin burns and eye damage.

12. Ecological information

Ecotoxicity	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Persistence and degradability	Methods for the determination of biodegradability are not applicable to inorganic substances.
Environmental Protection	Avoid release into the environment, may cause long-term adverse effects in the aquatic environment.

13. Disposal considerations

Disposal Considerations	Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and disposed of according to relevant local, state and federal government regulations.

14. Transport information

Transport Information	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.
U.N. Number	3098
UN proper shipping name	OXIDIZING LIQUID, CORROSIVE, N.O.S. - (Periodic acid 50%)
Transport hazard class(es)	5.1
Sub.Risk	8
Hazchem Code	2W
Packing Group	II
EPG Number	5C2
IERG Number	31

15. Regulatory information

Regulatory Information	Listed in the Australian Inventory of Chemical Substances (AICS). Not listed under WHS Regulation 2011, Schedule 10 - Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.
Poisons Schedule	Not Scheduled

16. Other Information

Literature References	'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 fot the Preparation of Safety Data Sheets for Hazardous Chemicals'.

	Standards Australia, 'SAA/SNZ HB 76:2010 Dangerous Goods - Initial Emergency Response Guide', Standards Australia/Standards New Zealand. Safe Work Australia, 'Hazardous Chemical Information System'. Safe Work Australia, 'National Code of Practice for the Labelling of Safe Work Hazardous Substances'. Safe Work Australia, 'National Exposure Standards for Atmospheric Contaminants in the Occupational Environment'.
Contact Person/Point	Amber Scientific 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 Amber Scientific 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 Amber Scientific 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.
Empirical Formula & Structural Formula	$HIO_4.2H_2O$ + aqua

...End Of MSDS...