Infosafe No™ 1CH5I Issue Date :August 2021 RE-ISSUED by CHEMSUPP

Product Name **POTASSIUM IODATE**

Classified as hazardous

1. Identification

GHS Product Identifier	POTASSIUM IODATE
Company Name	CHEMSUPPLY AUSTRALIA PTY LTD (ABN 19 008 264 211)
Address	38 - 50 Bedford Street GILLMAN SA 5013 Australia
Telephone/Fax Number	Tel: (08) 8440-2000
Emergency phone number	CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)
E-mail Address	www.chemsupply.com.au
Recommended use of the chemical and restrictions on use	Analysis (testing for zinc and arsenic); iodometry; feed additive; maturing agent and dough conditioner in foods; medicine (topical antiseptic); oxidizing agent in volumetric chemical analysis; reagent in mercury reduction method of pyrethrin analysis; in iodated table salt to provide supplemental iodine; analytical chemistry and laboratory reagent.

Other Names

Name	Product Code
POTASSIUM IODATE LR	PL078
POTASSIUM IODATE BP	PP078
POTASSIUM IODATE AR	PA078

Other Information

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.

2. Hazard Identification

GHS classification of the substance/mixture	Oxidizing Solids: Category 2 Acute Toxicity - Oral: Category 4 Specific target organ toxicity - Single Exposure Category 2
Signal Word (s)	WARNING
Hazard Statement (s)	H272 May intensify fire; oxidiser. H302 Harmful if swallowed. H371 May cause damage to organs.
Pictogram (s)	Flame over circle, Health hazard, Exclamation mark

Precautionary statement – Prevention	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. 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.

Precautionary statement – Response	P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. P330 Rinse mouth. P307+P311 IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician. P370+P378 In case of fire: Use flooding quantities of water for extinction.
Precautionary statement – Storage	P405 Store locked up.
Precautionary statement – Disposal	P501 Dispose of contents/container to an approved waste displosal plant.

3. Composition/information on ingredients

Ingredients	Name	CAS	Proportion
	Potassium iodate	7758-05-6	100 %

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 medical advice if effects persist.
Skin	Wash with plenty of soap and water. Remove contaminated clothing and wash before re-use. Seek medical advice if effects persist.
Eye contact	Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. In all cases of eye contamination it is a sensible precaution to seek medical advice.
First Aid Facilities	Maintain eyewash fountain and safety shower in work area.
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

Hazards from Combustion Products	Irritating and toxic fumes of iodine vapours and hydrogen iodide, oxides of potassium, oxides of iodine.
Specific Methods	Small fire: USE FLOODING QUANTITIES OF WATER. Do not use dry chemicals, CO2 or foam. If safe to do so, move undamaged containers from 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 fire is out - If impossible, withdraw from area and let fire burn. Avoid getting water inside 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 from heating, shock, friction or contamination. May ignite combustibles (wood, paper, clothing, etc). Fire may produce irritating, poisonous, and/or corrosive gases. Containers may explode when heated. Runoff may create fire or explosion hazard.
Hazchem Code	1Y
Decomposition Temp.	> 100 °C; partial decomposition at 560 °C.
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 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. Dry Spill Use clean non-sparking tools to transfer material to a clean, dry plastic container and cover loosely. Move container from spill area. 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	Avoid substance contact. Avoid generation of dusts: do not inhale dusts. Ensure supply of fresh air in enclosed rooms.
Personal Protection	Wear protective clothing specified for normal operations (see Section 8)
Clean-up Methods - Small Spillages	Do not use rags, sawdust or other combustible absorbents to wipe up spilled material.

7. Handling and storage

Precautions for Safe Handling	Avoid contact with skin, eyes and clothing. DO NOT breathe dust/vapour. Do not ingest. If ingested, seek medical attention. Avoid prolonged or repeated exposure. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Inform laundry personnel of contaminant's hazards. Use with adequate ventilation. Minimize dust generation and accumulation. Keep away from heat and all sources of ignition. Keep away from incompatibles such as combustible materials, flammable substances and reducing agents. Employ grounding, venting and explosion relief provisions in accord with accepted engineering practices in any process capable of generating dust and/or static electricity. Empty only into inert or non-flammable atmosphere. Emptying contents into a non-inert atmosphere where flammable vapours may be present could cause a flash fire or explosion due to electrostatic discharge. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.
Conditions for safe storage, including any incompatibilities	Store in a tightly closed container, in a cool, dry, ventilated area away from sources of heat, sparks, open flame, all sources of ignition, moisture, and incompatible substances. Keep away from combustible materials, flammable substances, acids, alkalies and reducing agents. Keep well closed and protected from direct sunlight and moisture. Protect container from physical damage. Oxidizing materials should be stored in a separate safety storage cabinet or room. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.
Storage Regulations	Refer Australian Standard AS 4326-1995 'The storage and handling of oxidizing agents'.
Storage Temperatures	Store at room temperature (15 to 25 °C recommended).
Unsuitable Materials	Aluminium, organic compounds.

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. These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These 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.
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 dust, vapours or mists. Respiratory protection should comply with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.
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	Flame retardant antistatic protective clothing. 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.
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

Form	Solid
Appearance	White crystals or crystalline powder.
Odour	Odourless.
Decomposition Temperature	> 100 °C; partial decomposition at 560 °C.
Melting Point	560 °C - partial decomposition
Solubility in Water	Soluble in cold water and hot water (4.74 g/100 ml water @ 0 °C; 9.16 g/100 ml H20 at 25 °C; 32.3 g/100 ml @ 100 °C).
Solubility in Organic Solvents	Soluble in potassium iodide, dilute sulfuric acid. Insoluble in alcohol, nitric acid.
Specific Gravity	3.89
pH	6 (50g/l H2O)
Volatile Component	0 %vol @ 21 °C
Flammability	Not combustible but assists combustion of other substances.
Explosion Properties	May explode when exposed to heat, mechanical shock or friction or can cause explosions with combustible or flammable materials or powdered metals. Potentially explosive reaction with charcoal + ozone; arsenic; carbon; phosphorus; sulfur; alkali metal hydrides; alkaline earth metal hydrides; antimony sulfide; arsenic sulfide; copper sulfide; tin sulfide; metal cyanides; metal thiocyanates; manganese dioxide; sulfides; cyanides; hydrides.

Molecular Weight	214.00
Oxidising Properties	Strong oxidising agent, can release gaseous oxygen when heated.

10. Stability and reactivity

Chemical Stability	Stable under ordinary conditions of use and storage. Strong oxidizing characteristics appear when mixed with acid solutions.
Conditions to Avoid	Heat, high temperatures, sparks, flames, ignition sources, dust generation, shock, friction, incompatibles, light, air and moisture.
Incompatible Materials	Combustible, flammable and reducing materials; organic compounds, hydrogen peroxide, peroxides, finely powdered metals, mixtures of iodates with finely divided aluminium, arsenic, copper, carbon, phosphorous (red or white) sulfur; hydrides (hydrides of alkali and alkaline earth metals); sulfides of antimony, arsenic, copper or tin, cyanides, metal cyanides, thiocyanates or impure manganese dioxide (especially + moisture) + heat, friction impact, sparks, or sulfuric acid, charcoal + ozone; easily oxidized materials, acid solutions.
Hazardous Decomposition Products	Irritating and toxic fumes of iodine vapours and hydrogen iodide, oxides of potassium, oxides of iodine.
Possibility of hazardous reactions	Reacts violently with combustible and reducing materials; aluminium, organic compounds, carbon, hydrogen peroxide, sulfides. Can react vigorously with reducing materials; potentially explosive reaction with charcoal + ozone; metals; arsenic; carbon; phosphorus; sulfur; alkali metal hydrides; alkaline earth metal hydrides; antimony sulfide; arsenic sulfide; copper sulfide; tin sulfide; metal cyanides; metal thiocyanates; manganese dioxide. Violent reaction with organic matter.
Hazardous Polymerization	Will not occur.

11. Toxicological Information

Ingestion	Harmful if swallowed. May cause gastrointestinal tract irritation with possible burns. May cause gastrointestinal upset with symptoms of abdominal pain, nausea, vomiting, hypermotility, and diarrhoea (possibly with blood). May affect behaviour/central nervous system (excitement, convulsions), respiration. Animal experiments suggest a potential for kidney and blood cell damage, similar to that of the bromates and chlorates.
Inhalation	May irritate the respiratory tract, with symptoms of coughing and possible shortness of breath. May cause acute pulmonary oedema, asphyxia, chemical pneumonitis, and upper airway obstruction caused by oedema.
Skin	May cause irritation and possible burns.
Eye	May cause eye irritation. May cause conjunctivitis. May cause permanent corneal opacification.
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 listed in the IARC Monographs. Not classified based on available information.
Reproductive Toxicity	Not classified based on available information.
STOT-single exposure	Specific target organ toxicity - Single Exposure Category 2 H371 May cause damage to organs.
STOT-repeated exposure	Not classified based on available information.
Chronic Effects	Prolonged or repeated ingestion may affect the liver (necrotic lesions), cause kidney dysfunction or failure (renal failure, haemoglobinuria, necrotic lesions), blood conditions (haemolysis, anaemia) and affect metabolism (anorexia). Chronic ingestion may cause central nervous system failure.

	Effects may be delayed. Prolonged or repeated skin contact may cause irritation. Prolonged or repeated exposure may cause gastrointestinal irritation.
Serious eye damage/irritation	Not classified based on available information.
Human Effects	In some susceptible individuals, the intake of iodine-containing substances can result in thyroid dysfunction as a result of the high iodine load. In certain circumstances, iodine excess can result in adverse thyroidal effects after only a single exposure to an iodine-rich substance.

12. Ecological information

Ecological Information	A harmful effect on aquatic organisms cannot be excluded in the event of improper handling or disposal.
Persistence and degradability	Methods for the determination of biodegradability are not applicable to inorganic substances. Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.
Mobility	Due to its solubility likely to be highly mobile in water systems and soil.

13. Disposal considerations

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

14. Transport information

Transport Information	Dangerous Goods of Class 5.1 Oxidising Agents 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	1479
UN proper shipping name	OXIDIZING SOLID, N.O.S. - (Potassium Iodate)
Transport hazard class(es)	5.1
Hazchem Code	1Y
Packing Group	II
EPG Number	5B1
IERG Number	31
Environmental Hazards	A harmful effect on aquatic organisms cannot be excluded in the event of improper handling or disposal.

15. Regulatory information

Regulatory Information	All the constituents of this product are listed on the Australian Inventory of Chemical Substances (AICS), or exempted. 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 for 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	Paul McCarthy Ph. (08) 8440 2000 DISCLAIMER STATEMENT: 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.
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