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Infosafe No™ 1CH5J

Issue Date :November 2022 RE-ISSUED by CHEMSUPP

#### Product Name **POTASSIUM IODIDE**

Classified as hazardous

Section 1 - Identif	ication	
Product Identifier	POTASSIUM IODIDE	
Company Name	CHEMSUPPLY AUSTRALIA PTY LTD (ABN 19 00	08 264 211)
Address	38 - 50 Bedford Street GILLMAN SA 5013 Australia	
Telephone/Fax Number	Tel: (08) 8440-2000	
Emergency Phone Number	CHEMCALL 1800 127 406 (Australia) / +6	54-4-917-9888 (International)
E-mail Address	www.chemsupply.com.au	
Recommended use of the chemical and restrictions on use	Reagent in analytical chemistry, photog feed additive, spectroscopy, infrared t supplement, expectorant for treatment of antifungal agent (human and vet use); i disorders; ingredient in personal hygic for livestock manure, and laboratory re	graphic emulsions (precipitating Ag), cransmission, scintillation, dietary of chronic respiratory diseases; odine source in treatment of thyroid ene products; topical deodorizing agent eagent.
Other Names	Name	Product Code
	POTASSIUM IODIDE LR POTASSIUM IODIDE AR Potassium Iodide Reagent Grade (ACS) Fine granular	PL001 PA001 PR001
<b>Other Information</b>		
	for any use or purpose. The user must a before use or application intended purp before use or application is recommende upon ChemSupply Australia Pty Ltd with advice in relation to the suitability of disclaimed. Except to the extent prohik any statute as to the merchantable qual purpose is hereby excluded. This produc provisions of Part V, Division 2 of the liability of ChemSupply Australia Pty I supply of equivalent goods or payment of acquiring equivalent goods.	ascertain that this product is suitable ascertain the suitability of the product bose. Preliminary testing of the product ed. Any reliance or purported reliance respect to any skill or judgement or of this product of any purpose is pited at law, any condition implied by tity of this product or fitness for any et is not sold by description. Where the a Trade Practices Act apply, the of the cost of replacing the goods or

#### Section 2 - Hazard(s) Identification

GHS Classification of the Substance/Mixture	Acute Toxicity - Dermal: Category 2 Eye Damage/Irritation: Category 2A Acute Toxicity - Oral: Category 4 Specific target organ toxicity (Oral, Thyroid) Repeated Exposure: Category 1
Signal Word	DANGER
Hazard Statement (s)	H302 Harmful if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation. H372 Causes damage to organs (Thyriod)through prolonged or repeated exposure.
Pictogram (s)	Health hazard, Exclamation mark
Precautionary	P260 Do not breathe dust/fume/gas/mist/vapours/spray.
Statement – Prevention	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.



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Product Name	POTASSIUM IODIDE				
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Precautionary Statement – Response	P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. P330 Rinse mouth. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P332+P313 If skin irritation occurs: Get medical advice/attention. P362 Take off contaminated clothing and wash before reuse. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 If eye irritation persists: Get medical advice/attention. P314 Get medical advice/attention if you feel unwell.				
Precautionary Statement – Storage Precautionary Statement – Disposal	P405 Store locked up. P501 Dispose of contents/container to an approved waste disposal plant.				
Section 3 - Compo	osition and Information	on Ingre	dients		
Ingredients	<u>Name</u> Potassium iodide	<b>CAS</b> 768	<u>5</u> 31-11-0		Proportion 100 %
Section 4 - First A	id Measures				
Inhalation	Remove from exposure artificial respirat: attention in severe	e, rest a lon. If cases, a	and keep warm breathing is or if symptom	. If brea difficult s develop.	thing has stopped, apply , give oxygen. Seek medical
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 area thoroughly with copious amounts of running water. Remove contaminated clothing and wash before reuse. If symptoms develop seek medical attention.				
Eye	If contact with the approximately 15 min contaminated water :	eye(s) o nutes hoi into the	occurs, wash lding eyelid( non-affected	with copio s) open. T leye. Seek	us amounts of water for ake care not to rinse medical attention.
First Aid Facilities	Maintain eyewash fou	intain ai	nd drench fac	ilities in	work area.
Advice to Doctor	Treat symptomatically based on judgement of doctor and individual reactions of the patient.				
	New Zealand 0800 764	$\frac{1}{1}$ 766) o:	r a doctor.	n centre (	rnone eg Australia 15 1120,
Section 5 - Firefig	hting Measures				
Hazards from Combustion Products	Toxic fumes includir possibly also free,	ng hydrog or ionio	gen iodide (H c iodine, tox	I), oxides ic iodine	of potassium and iodine, vapours and iodate.
Specific Methods	Use extinguishing media most appropriate for the surrounding fire. No limitations to the type of extinguishing media.				
Specific Hazards Arising from the Chemical	Material does not burn. Runoff may pollute waterways. Fire or heat may produce irritating, poisonous and/or corrosive fumes. Containers may explode when heated.				
Precautions in connection with Fire	Wear SCBA and struct	ural fi:	refighter's u	niform.	
Section 6 - Accide	ntal Release Measures				
Personal Precautions	Avoid substance cont Ensure supply of fre	act. Avo esh air :	oid generatic in enclosed r	n of dusts ooms.	: do not inhale dusts.
<b>Personal Protection</b>	Wear protective clot	thing spe	ecified for n	ormal oper	ations (see Section 8)
Clean-up Methods - Small Spillages	Sweep up (avoid gene to a clean, suitable with local regulation	erating o e, clearions.	dust) and usi ly labelled c	ng clean n ontainer f	on-sparking tools transfer or disposal in accordance

### Section 7 - Handling and Storage



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Precautions for Safe Handling	Avoid ingestion and inhalation of dust. Avoid contact with eyes, skin and clothing. Minimize dust generation and accumulation. Keep containers closed when not in use. Ensure good ventilation at the workplace. Provide appropriate exhaust ventilation at places where dust is formed. Use with adequate ventilation. If you feel unwell, seek medical attention and show the label when possible. Wear suitable protective clothing and equipment. As with all chemicals, wash hands thoroughly after handling. Ensure a high level of personal hygiene is maintained when using this product. That is; always wash hands before eating, drinking, smoking or using the toilet. Protect from freezing and physical damage. Keep away from incompatibles such as oxidizing agents, reducing agents, metals, acids, moisture.
Conditions for safe storage, including any incompatibilities	Store in labelled, corrosion- and light-resistant, tightly closed containers, in a cool, dry, well ventilated area and isolated from incompatible substances. Air, light, and moisture sensitive - accelerate decomposition. Protect against physical damage and exposure to air, light and humidity/water/moisture. Store away from reducing agents, acids. Iodine has a persistent and irritating odour and should not be stored near odour sensitive material. Prolonged storage is not recommended because of possible degradation problems, including yellowing of the potassium iodide product. Containers of this material may be hazardous when empty since they retain product residues
Corrosiveness	(dust, solids); observe all warnings and precautions listed for the product. Corrosive in presence of steel, of aluminium, of zinc. Corrosive in all concentrations to most metals, except stainless steel, titanium, and tantalum. Incompatible with water, producing a corrosive. Non-corrosive in presence of glass, of copper, of stainless steel(304), of stainless steel(316).
Storage Temperatures	Store below 40 $^\circ\text{C},$ preferably between 15 and 25 $^\circ\text{C},$ unless otherwise specified by manufacturer.
Additional information on precautions for use	Iodides should only be heated in a fume cupboard if iodine vapours are being produced.

### Section 8 - Exposure Controls and Personal Protection

Other Exposure Information	A time weighted average (TWA) concentration for an 8 hour day, and 5 day week has not been established by Safe Work Australia for this product. There is a blanket limit of 10 mg/m <sup>3</sup> for dusts when limits have not otherwise been established.
Engineering Controls	In industrial situations 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 and 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.
Hand Protection	Hand protection should comply with AS 2161, Occupational protective gloves - Selection, use and maintenance. Recommendation: Excellent: Vinyl, nitrile, neoprene gloves. Good: NR latex.
Personal Protective Equipment	Final choice of personal protective equipment will depend on individual circumstances and/or according to risk assessments undertaken.
<b>Body Protection</b>	Clean clothing or protective 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.



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#### **Section 9 - Physical and Chemical Properties**

Appearance	Colourless or white, cubical crystals, white to pale yellow, slightly deliquescent granules, or powder; clear, colourless to slightly yellow liquid (aqueous solution becomes yellow in time due to oxidation, but a small amount of alkali prevents it).
Odour	Odourless.
Melting Point	681 °C (solid); ~ 0 °C (11-50%w/v).
<b>Boiling Point</b>	1330 °C (solid); ~ 100 °C (11-50%w/v).
Solubility in Water	Very soluble, 128 g/100 ml (6 °C); 148 g/100 g water at 25 °C; 127.5 g sol in 0.5 mL boiling water; 30 g KI with 21 mL water gives 30 mL of a saturated solution at 25 °C.
Solubility in Organic Solvents	Soluble in glycerol, ether, ammonia and methanol; slightly soluble in ethanol; partially soluble in acetone; readily dissolves elemental iodine (Potassium iodide solution).
Specific Gravity	3.13 (solid); ~ 1.07-1.36 (11-50%w/v).
рН	$\sim$ 6.9 at 50 g/l H2O (20 $^{\circ}\text{C})\text{,}$ aqueous solution is neutral or usually alkaline.
Vapour Pressure	1.33 hPa (1 mm Hg) at 745 °C.
Volatile Component	0 %vol @ 21 °C
Flammability	Non combustible material.
<b>Explosion Properties</b>	Potassium iodide solution and fluorine perchlorate will explode on contact.
Molecular Weight	166.00
Other Information	Taste: Strong, bitter, saline taste. Index of refraction: 1.677.

#### Section 10 - Stability and Reactivity

Stable in dry air, under ordinary conditions of use and storage. Air sensitive. Moisture sensitive. Light sensitive. On long exposure to air becomes yellow due to release of iodine.
A sample of fluorine perchlorate exploded on contact with a potassium iodide solution. Moisture and light accelerate decomposition. Air causes decomposition to iodine. Reacts violently with strong oxidizers, bromotrifluorides, chlorotrifluorides, fluorine perchlorate, metallic salts. Attacks metals in moist environments. Reactive with oxidizing agents, reducing agents, organic materials, acids.
Moisture, light, dust generation, prolonged exposure to air, and incompatible materials.
Ammonia, halogen-halogen compounds, fluorine, hydrogen peroxide, salts of alkaloids, chloral hydrate, calomel (mercurous chloride), potassium chlorate, tartaric and other acids, diazonium salts, charcoal, ozone, strong reducers, alkali metals, most metals (brass, aluminium/aluminium alloys, magnesium, zinc, cadmium, copper, tin/tin oxides, nickel, steel (all types and surface treatments)), metal powders, metallic salts, organic materials, light, oxidizing agents, water/moisture, bromine trifluoride, fluorine perchlorate, diisopropyl peroxydicarbonate, perchloryl fluoride, chlorine trifluoride.
Toxic fumes including hydrogen iodide (HI), oxides of potassium and iodine, possibly also free, or ionic iodine, toxic iodine vapours and iodate.
Will not occur.

#### Section 11 - Toxicological Information

Ingestion

Ingestion may result in a metallic taste, increased salivary and bronchial secretions, gastrointestinal tract irritation with nausea, vomiting, diarrhoea, abdominal pain, parotitis and/or convulsions. Acute poisoning by potassium salts is likely to give rise to irritation of the throat, general



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	stomach upset and vomiting which may lead to weakness, agitation and confusion, hypotension, paralysis and possible circulatory disturbances including cardiac arrhythmias, heart block and cardiac arrest. May affect behaviour (somnolence, muscle weakness), respiration (dyspnoea). Acute hypersensitivity reactions including angioedema, urticaria, Stevens Johnson syndrome, systemic vasculitis, serum-sickness-like reactions such as fever, arthralgia, lymph node enlargement, and eosinophilia may appear. Thrombotic thrombocytopenic purpura, and fatal periarteritis nodosa attributed to hypersensitivity to iodide has been described. Iodides have been known to cause drug-induced fevers, which are usually of short duration.
Inhalation	the nose, throat and respiratory system. Symptoms may include coughing and shortness of breath. May cause respiratory sensitization. May cause pulmonary oedema and inflammation of the tonsils.
Skin	May cause irritation to skin and mucous membranes with redness, pain, and itching. May be harmful if absorbed through the skin. May cause allergic sensitization in certain individuals.
Eye	May cause irritation, redness, pain, itching and tearing.
Carcinogenicity	Not listed in the IARC Monographs.
Reproductive Toxicity	Suspected Developmental Toxicant (Jankovic, J. A Screening Method for Occupational Reproductive Health Risk. American Industrial Hygiene Association Journal. 57: 641-649. 1996.) Potassium Iodide has been investigated as reproductive effector. Reproductive effects have been observed on tests with laboratory animals. Reproductive effects have been observed on tests with humans. Possible risk of harm to the unborn child. Iodides are readily diffused across the placenta. Potassium iodide is distributed into human breast milk. Exposure to excessive amounts of iodine during pregnancy is capable of producing foetal hypothyroidism. Cretinism and goiter have been reported in children born to mothers chronically taking iodides during pregnancy. Neonatal deaths from respiratory distress secondary to goiter have been reported. Potassium iodide has been shown to produce foetotoxicity in newborns. Reproductive effects, TDLo (woman) 2700 mg/kg (1 - 39 w preg): Specific developmental abnormality (endocrine system).
STOT - Repeated Exposure	Specific target organ toxicity (Oral, Thyroid) Repeated Exposure: Category 1
Mutagenicity	Bacterial mutagenicity: Salmonella typhimurium: negative, Escherichia coli: negative. Mutagenic for mammalian somatic cells. Mutagenic effects have occurred in experimental animals.
Chronic Effects	Chronic ingestion of iodides may produce 'iodism,' which may be manifested by salivation, skin rash or eruptions, running nose, sneezing, conjunctivitis, fever, headache, irritation of mucous membranes, laryngitis, bronchitis, stomatits and parotitis. In severe cases, the skin may show pimples, boils, redness, hives, blisters and black and blue spots, and various cutaneous manifestations, including erythema nodosum, polymorphic eruptions, urticaria, vasculitis, and petechia, and weakness, anaemia, weight loss and general depression may also occur. These symptoms affect certain individuals who are highly sensitive to iodides and they may occur after exposure to minute amounts of iodine or iodides. Chronic ingestion may also affect metabolism (anorexia), and thyroid gland (hypothyroidism, goiter and rarely hyperthyroidism). Furthermore, chronic ingestion of iodides (in animals) during pregnancy has resulted in foetal deaths, severe goiter and cretinoid appearance of the newborn.

#### Section 12 - Ecological Information

Ecological Information	No ecological problems are to be expected when the product is handled and used with due care and attention.
Persistence and Degradability	Methods for the determination of biodegradability are not applicable to inorganic substances. While data specific to potassium iodide were not located, the literature suggests that some pharmaceutically active compounds originating from human



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Acute Toxicity - Fish	and veterinary therapy are not eliminated completely in municipal sewage treatment plants and are therefore discharged into receiving waters. Wastewater treatment processes often were not designed to remove them from the effluent. Selected organic waste compounds may be degrading to new and more persistent compounds that may be released instead of or in addition to the parent compound. Studies have indicated that several polar pharmaceutically active compounds can leach through subsoils into aquifers. Onchorhynchus mykiss LC50: 2190 mg/l /96 h.			
Section 13 - Dispo	sal Considerations			
Disposal Considerations	Whatever cannot be saved for recovery or recycling should be disposed of according to relevant local, state and federal government regulations.			
Section 14 - Trans	port Information			
Transport Information	Not classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.			
Section 15 - Regul	atory Information			
Regulatory Information	Listed in the Australian Inventory of Chemical Substances (AICS).			
Poisons Schedule	Not Scheduled			
Section 16 - Any C	Other Relevant Information			
Literature References Contact Person/Point	<pre>'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'. 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</pre>			
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