

Version 1.1

Issue date 27/09/2024

SECTION 1 – IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY

Product Identifier

Product Name	Potassium Iodide
Other Names	Iodide of Potash, Potassium Salt
Proper Shipping Name	None
Other means of Identification	None

Relevant identified uses of the substance or mixture

Relevant identified uses	Reagent in analytical chemistry, Photographic emulsions (precipitating silver), Feed additive, Spectroscopy, Infrared transmission, dietary supplement (up to 0.01% in table salt)
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Details of the supplier of the safety data sheet

Registered company name	Vetpak Limited
Address	249 Bruce Berquist Dr, Te Awamutu 3800.
Telephone	(07) 870 2024
Website	www.vetpak.co.nz
Email	sales@vetpak.co.nz

Emergency telephone numbers


Association/ Organisation	New Zealand National Poison information centre
Emergency telephone number	0800 764 766 (07) 870 2024 Vetpak. 8.00am to 5.00pm Monday to Friday except public holidays.
Other emergency telephone numbers	New Zealand emergency services 111

SECTION 2 – HAZARDS IDENTIFICATION

Hazard Classification:

Hazardous according to the criteria of the Globally Harmonised System of classification and labelling of chemicals (GHS)

Label pictograms

GHS label elements	
Signal Word	DANGER

Hazard statements

HSNO	Hazard Code	GHS Category	Hazard Statement
6.5B	H 317	Category 1	May cause an allergic skin reaction
6.9A	H 370/372	Category 1	Causes damage to organs

9.1B	H 411	Category 1	Toxic to aquatic life with long lasting effects.
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Precautionary statements prevention

P103	Read label before use
P260	Do not breathe dust/fume/gas/mist/vapours/spray
P261	Avoid breathing dust/fume/gas/mist/vapours/spray
P264	Wash hands and clothing thoroughly after handling.
P270	Do not eat, drink or smoke when using this product
P272	Contaminated work clothing should not be allowed out of the workplace
P273	Avoid release into the environment
P280	Wear protective gloves/eye protection/ face protection

Precautionary statement responses

P302 + P352	If on skin wash with plenty of soap and water
P314	Get medical advice/attention if you feel unwell.
P321	If on skin no specific treatment required
P337 + P313	If eye irritation persists: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.

Precautionary statement disposal

P501	Disposal should be through a suitably qualified contractor following the EPA guidelines
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SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Mixtures

CAS Number	% (weight)	Name
7681 – 11 – 0	100	Potassium Iodide

SECTION 4 – FIRST AID MEASURES

Description of first aid measures

Eye contact	<ul style="list-style-type: none"> ➤ Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally lifting the upper and lower lids. ➤ Remove contact lenses if present and easy to do. ➤ If eye irritation persists, get medical advice/attention.
Skin contact	<ul style="list-style-type: none"> ➤ Wash with plenty of soap and water. ➤ Take off contaminated clothing and wash it before reuse. ➤ If skin irritation occurs, get medical advice/attention.
Inhalation	<ul style="list-style-type: none"> ➤ Remove victim to fresh air and keep at rest in a position comfortable for breathing. ➤ If respiratory symptoms persist, get medical advice/attention. ➤ Give artificial respiration if victim is not breathing.
Ingestion	<ul style="list-style-type: none"> ➤ Rinse mouth, and then drink a glass of water. Do not induce vomiting. Get medical advice/attention if you feel unwell. ➤ Never give anything by mouth to an unconscious person.
Advice to the doctor	Show this safety data sheet (SDS) to the doctor in attendance. Treat symptomatically. Keep victim calm and warm. Ensure that medical personnel are aware of the material involved and take precautions to protect themselves



SECTION 5 – FIREFIGHTING MEASURES

Extinguishing media	<ul style="list-style-type: none"> ➤ Use dry chemical, Carbon dioxide (CO2) ➤ Alcohol-resistant foam or water spray for extinction ➤ DO NOT use water jet as it may spread the fire
Flammability Conditions	<ul style="list-style-type: none"> ➤ Fire or heat may produce irritating, toxic and/or corrosive fumes, including potassium oxides, hydrogen iodide
Advice for fire fighters	
Fire fighting	<ul style="list-style-type: none"> ➤ Alert fire brigade and tell location and nature of hazard ➤ Wear breathing apparatus plus protective gloves in the event of a fire ➤ Prevent spillage from entering the waterways or drains ➤ Consider evacuation (or protect in place) ➤ Fight the fire from a safe distance and adequate cover
Fire/explosion hazard	<ul style="list-style-type: none"> ➤ Fire or heat may produce irritating, toxic and/or corrosive fumes, including potassium oxides, hydrogen iodide.
Special fire fighting hazards	<ul style="list-style-type: none"> ➤ Contain runoff from fire control or dilution water - Runoff may pollute waterways.
Protection Equipment	<ul style="list-style-type: none"> ➤ Wear positive pressure self-contained breathing apparatus (SCBA) and chemical splash suit. SCBA and structural firefighter's uniform may provide limited protection.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor spills	<ul style="list-style-type: none"> ➤ Clean up all spills immediately. ➤ Avoid contact with skin and eyes. ➤ Avoid generating dust. Pick up and transfer to properly labeled containers for disposal.
Major spills	<ul style="list-style-type: none"> ➤ Clear area of personnel. Control personal contact by using protective equipment. ➤ Prevent spillage from entering drains, sewers or water courses. Recover product wherever possible. ➤ Put residues in labeled plastic pails or other suitable sealed containers for disposal. ➤ If contamination of drains or waterways occurs, advise emergency services
Clean Up Procedures	<ul style="list-style-type: none"> ➤ Recover large spills for salvage or disposal. ➤ Never return spills into original containers for re-use.
Containment	<ul style="list-style-type: none"> ➤ Prevent entry into waterways, drains or confined areas.
Decontamination	<ul style="list-style-type: none"> ➤ Clean surface thoroughly to remove residual contamination.
Environment Precaution Measures	<ul style="list-style-type: none"> ➤ Prevent entry into drains and waterways. ➤ Dispose of any absorbent material properly according to local authority regulations

SECTION 7 – HANDLING AND STORAGE

Precautions for safe handling

Safe Handling	<ul style="list-style-type: none"> ➤ Read carefully and follow all instructions. ➤ Wash hands thoroughly after handling. ➤ Wear protective clothing as detailed in Section 8. ➤ Avoid generating dusts. ➤ Use in outdoors or in well-ventilated area.
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Conditions for safe storage, including any incompatibilities

Suitable packaging	➤ Original packaging. Check that packaging is clearly labeled
Storage incompatibility	➤ Isolate from incompatible substances: diazonium salts, diisopropyl peroxydicarbonate, oxidants, bromine and chlorine trifluorides, fluorine perchlorate, calomel (mercurous chloride), potassium chlorate, metallic salts, tartaric and other acids
Storage requirements	<ul style="list-style-type: none"> ➤ Keep in tightly closed container, stored in a cool, dry, well ventilated area. ➤ Prolonged storage is not recommended because of possible degradation problems, including yellowing of the potassium iodide product. ➤ Always inspect the potassium iodides colour and overall quality before use. ➤ Containers of this material may be hazardous when empty since they retain product residues (dust, solids).

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

General	No value assigned for this specific material by Worksafe New Zealand. However, Workplace Exposure Standard(s) for particulates: Dust otherwise not specified: WES-TWA 10 mg/m ³ – inspirable dust, 3 mg/m ³ - respirable dust.
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Exposure controls

Appropriate engineering controls	<p>A system of local and/or general exhaust is recommended to keep employee exposures as low as possible.</p> <p>Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.</p> <p>Do not eat, drink or smoke when using this product.</p> <p>Always wash hands before smoking, eating, drinking or using the toilet.</p> <p>Wash contaminated clothing and other protective equipment before storage or re-use.</p>
Personal protection	
Eye and face protection	<ul style="list-style-type: none"> ➤ Safety glasses with side shields ➤ Chemical goggles ➤ Contact lenses may pose a special hazard soft contact lenses may absorb and concentrate materials. ➤ Medical personal should be trained and readily available in the event of chemical exposure; they should begin eye irrigation and remove contact lenses as soon as practicable. Lenses should be removed at the first sign of eye irritation
Skin protection	Wear general protective gloves e.g. light weight rubber gloves
Hand / feet protection	As above for hands; wear appropriate footwear for the environment
Other protection	<ul style="list-style-type: none"> ➤ Overalls ➤ PVC Aprons ➤ PVC protective gear ➤ Eyewash facilities ➤ Ensure there is ready access to a safety shower

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Crystals / Granules	Relative density (Water = 1)	Not available
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Colour	White	Solubility in water	soluble
Odour	Odourless	Decomposition temperature	Not available
pH	6 – 9 (5% solution)	Viscosity	Not available
Melting point (°C)	680 °C	Bulk density	Not available
Boiling point (°C)	1330 °C	Specific gravity	3.1
Flash point (°C)	Not combustible	Explosive properties	Not explosive
Evaporation rate	Not available	Oxidising properties	Not available
Flammability	Not flammable	Volatile component (% vol)	None

SECTION 10 – STABILITY AND REACTIVITY

General Information	Product is stable under normal conditions of use, storage and temperature.
Chemical stability	Product is stable under normal conditions of use, storage and temperature.
Conditions to avoid	Avoid moisture, air light and incompatibles. Exothermic reaction with oxidising agents. Risk of ignition or formation of inflammable gases or vapours with fluorine.
Incompatible materials	Keep away from incompatibles such as diazonium salts, diisopropyl peroxydicarbonate, oxidants, bromine and chlorine trifluorides. fluorine perchlorate, calomel (mercurous chloride), potassium chlorate, metallic salts, tartaric and other acids
Hazardous decomposition	On long exposure to air becomes yellow due to the release of iodine. Hazardous decomposition products include oxides of the contained metal and halogen, possibly also free or ionic halogen.
Hazardous Polymerisation	will not occur

SECTION 11 – TOXICOLOGICAL INFORMATION

General Information	Acute Oral Toxicity, Rat, Oral LD50: 1000 mg/kg
Swallowed	May cause gastrointestinal disturbances with nausea, vomiting and diarrhea
Eyes	Dust may cause mechanical eye irritation
Skin	May cause mechanical skin irritation with redness and pain. Epidemiological data shows that a small quantity of the product may cause skin sensitization. The symptoms include redness, itching and skin rash. Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals
Inhalation	Breathing in dust may result in respiratory irritation
Carcinogenic	Not applicable
Mutagenicity	Not applicable
Reproductive effects	Exposure to excessive amounts of iodine during pregnancy is capable of producing fetal hypothyroidism. Iodine-containing drugs have been associated with fetal goiter
Specific target organ toxicity	Prolonged exposure to iodides may produce iodism in sensitive individuals. Symptoms of exposure include: skin rash, running nose, headache and irritation of the mucous membrane. For severe cases the skin may show pimples, boils, hives, blisters and black and blue spots. Iodides are readily diffused across the placenta. Neonatal deaths from respiratory distress secondary to goiter have been reported. Iodides have been known to cause drug-induced fevers, which are usually of short duration

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity	Aquatic toxicity (acute)
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	Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) – 2,190 mg/l – 96h Toxicity to daphnia & other aquatic invertebrates EC50 – Daphnia – 2.7 mg/l – 24h
Persistence/Degradability	No information available
Bioaccumulation Potential	No information available
Environmental Impact	No information available

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / packaging disposal	<ul style="list-style-type: none"> ➤ Do not allow wash water from cleaning or process equipment to enter drains ➤ It may be necessary to collect all wash water for treatment before disposal ➤ In all case disposal to sewer may be subject to local laws and regulations and these should be considered first ➤ If in doubt contact the responsible authority ➤ Contact manufacturer for recycling options or consult local or regional waste management authority for disposal ➤ Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed
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SECTION 14 – TRANSPORT INFORMATION

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: UN, IATA, IMDG

Not classified as a Dangerous Good under NZS 5433:2007 Transport of Dangerous Goods on Land

SECTION 15 – REGULATORY INFORMATION

Safety, health and environment regulations / legislation specific for the substance or mixture

GHS Codes	6.5B, 6.9A, 9.1B
National Inventory	Status - Approved
Australia – AICS	Yes
Europe – EINEC / ELINCS / NLP	Yes
New Zealand – NZIoC	Yes - All ingredients are on the inventory
Environmental Protection Authority (New Zealand)	Additives, Process Chemicals & Raw Materials (Subsidiary Hazard) Group Standard 2020
Approval Code	HSR002503

SECTION 16 – OTHER INFORMATION

While Vetpak Limited in good faith has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, Vetpak Limited accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

New Zealand National Poison Information Centre: 0800 764 766
New Zealand Emergency Services: 111
Vetpak Limited: +64 7 870 2024

Definitions and abbreviations

PC – TWA	Permissible concentration – time weighted average
PC – STEL	Permissible concentration – short term exposure limit



IARC	International agency for research on cancer
ACGIH	American conference of Government Industrial Hygiene
STEL	Short term exposure limit
TEEL	Temporary emergency exposure limit
IDLH	Immediate dangerous to life or health concentration
OSF	Odour safety factor
NOAEL	No observed adverse effect level
LOAEL	Lowest observed adverse effect level
TLV	Threshold limit value
LOD	Limit of detection
OTV	Odour threshold value
BCF	BioConcentration factors

END OF SDS

