

Version 1.1

Issue date 18/09/2024

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

Product Identifier

Product Name	Sodium Iodide
Other Names	Sodium mono-iodide
Proper Shipping Name	Environmentally hazardous substances, solid, n.o.s.
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 – Poisons Hotline (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:

Classed as a dangerous good for transport and logistics

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
6.1E	H 303, H 313, H 333	Category 5	May be harmful if swallowed, in contact with the skin, inhaled
6.5B	H 317	Category 1	May cause an allergic skin reaction
6.9B	H 370	Category 1	Causes damage to organs
9.1B	H 400	Category 1	Very toxic to aquatic life

Precautionary statements prevention

P102	Keep out of reach of children
P103	Read label before use
P261	Avoid breathing fumes/gas/mist/vapours/spray
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 to the environment.
P280	Wear protective gloves/eye protection/ face protection

Precautionary statement responses

P101	If medical advice is needed have the product container or label on hand
P302 + P352	IF ON SKIN: Wash with plenty of soap and water
P304 + P312	IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.
P307 + P311	IF exposed: Call a POISON CENTER or doctor/physician.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P321	No specific treatment required
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage

Precautionary statement storage

P405	Store locked up
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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 – 82 – 5	100%	Potassium Iodide

SECTION 4 – FIRST AID MEASURES

Description of first aid measures

Eye contact	If this product comes in contact with eyes <ul style="list-style-type: none">➤ Flush out immediately with water➤ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel➤ Continue rinsing for 15 minutes, if eye irritation persists seek medical attention
Skin contact	If skin or hair contact occurs



	<ul style="list-style-type: none"> ➤ Remove and isolate contaminated clothing and shoes ➤ Wash skin and hair with running water (and soap if available) ➤ Seek medical attention in event of irritation
Inhalation	<ul style="list-style-type: none"> ➤ Remove victim to fresh air and keep warm ➤ Remove and isolate contaminated clothing and shoes and loosen other clothing ➤ Do not use mouth to mouth method if the victim inhaled or ingested the substance
Ingestion	<ul style="list-style-type: none"> ➤ Immediately give a glass of water to rinse mouth ➤ Never give anything by mouth to an unconscious person ➤ Seek medical attention if symptoms develop and persist ➤ If vomiting occurs keep head below hips to prevent aspiration to lungs
Advice to the doctor	Treat symptomatically based on judgment of doctor and individual reactions of patient. Chronic ingestion of iodides may produce iodism which may be characterized by skin rash, running nose, headaches, and irritation of mucus membranes. Weakness, anemia, loss of weight, and general depression may also occur.

SECTION 5 – FIREFIGHTING MEASURES

Extinguishing media	<ul style="list-style-type: none"> ➤ Use dry chemical, Carbon dioxide (CO2) ➤ Alcohol-resistant foam ➤ Water spray suitable for the surrounding conditions
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Special hazards arising from the substrate or mixture

Fire incompatibility	Not considered to be an explosions hazard or to be a fire hazard
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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 any fire from a safe distance and adequate cover
Hazardous Combustion Products	<ul style="list-style-type: none"> ➤ Hydrogen iodide. Sodium oxides
Specific Hazards Arising from the Chemical	<ul style="list-style-type: none"> ➤ Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. ➤ Do not allow run-off from fire-fighting to enter drains or water courses.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor spills	<ul style="list-style-type: none"> ➤ Clean up spills immediately ➤ Avoid breathing vapours and contact with skin and eyes ➤ Contain and absorb small quantities with absorbent material
Major spills	<ul style="list-style-type: none"> ➤ Clear area of personnel and move upwind ➤ Alert fire brigade and tell them location and nature of hazard ➤ Prevent spillage from entering the waterways or drains ➤ Consider evacuation (or protect in place) ➤ Increase ventilation
Clean Up Procedures	<ul style="list-style-type: none"> ➤ Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal
Containment	<ul style="list-style-type: none"> ➤ Prevent entry into waterways, sweep up and shovel into suitable containers for disposal



SECTION 7 – HANDLING AND STORAGE

Precautions for safe handling

Safe Handling	<ul style="list-style-type: none"> ➤ Wear personal protective equipment/face protection. ➤ Ensure adequate ventilation. ➤ Avoid dust formation. Do not get in eyes, on skin, or on clothing. ➤ Avoid ingestion and inhalation.
Other information	<ul style="list-style-type: none"> ➤ Keep containers tightly closed in a dry, cool and well-ventilated place. ➤ Store under an inert atmosphere. Keep under nitrogen. ➤ Protect from moisture. Protect from sunlight. ➤ Incompatible Materials. Strong oxidizing agents. Strong acids. Finely powdered metals


Conditions for safe storage, including any incompatibilities

Suitable container	<ul style="list-style-type: none"> ➤ Packing as supplied by manufacturer ➤ Plastic containers may only used if approved by manufacturer ➤ Check containers are clearly labelled and free from leaks
Storage incompatibility	<ul style="list-style-type: none"> ➤ Avoid strong oxidizing agents, strong acids

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

General	<p>Airborne exposure limits:</p> <p>OSHA permissible exposure limited (PEL): 15mg/M³</p> <p>Total Dust, 5mg/M³ Respirable fraction for nuisance dusts. –</p> <p>ACGIH Threshold Limit Value (TLV); 10mg/M³</p> <p>Total Dust containing no asbestos and <1% Crystalline Silica for particles not otherwise classified.</p>
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Exposure controls

Appropriate engineering controls	<p>Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level protection.</p> <p>The basic controls are:</p> <p>Process controls which involve changing the job activity or process to reduce risk</p> <p>Enclosure and or isolation source control keeping workers physically safe</p> <p>Ventilation that strategically adds and removes air in work environment.</p> <p>Ventilation can remove or dilute an air contaminant if designed properly</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



Body protection	Overalls or PVC Aprons
Other protection	<ul style="list-style-type: none"> ➤ Overalls ➤ PVC protective gear ➤ Eyewash facilities ➤ Ensure there is ready access to a safety shower ➤ Respiratory protection when working in case of inadequate ventilation

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	White solid powder	Relative density (Water = 1)	Not available
Odour	Odourless	Specific Gravity	3.13
Odour threshold	Not Available	Decomposition temperature	Not available
pH	7 – 9	Viscosity	Not available
Melting point (°C)	651°C	Water Solubility	184 g/100ml (25°C)
Boiling point (°C)	1300 °C	Taste	Not available
Flash point (°C)	Not available	Explosive properties	Not available
Evaporation rate	Not available	Oxidising properties	Not available
Flammability	Not flammable	Volatile component (% vol)	Not available

SECTION 10 – STABILITY AND REACTIVITY

General Information	No hazardous reactions under normal conditions
Chemical stability	Hygroscopic, air sensitive, light sensitive
Conditions to avoid	Avoid moisture, air, light and incompatibles
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 Products	Long exposure to air the substance 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	This will not occur.

SECTION 11 – TOXICOLOGICAL INFORMATION

General Information	Sodium Iodide LD50 = 4340 mg/kg (Rat) Inhalation of large quantities of vapour may cause respiratory irritation Ingestion of large quantities may cause damage to thyroid
Ingestion	May be harmful if swallowed and enters airways.
Skin	Harmful in contact with skin. May cause an allergic skin reaction.
Inhalation	Harmful if inhaled
Eyes	May cause irritation, redness and pain
Chronic Toxicity	Causes damage to organs through prolonged or repeated exposure.
Carcinogenic Effects	Not listed as carcinogenic
Mutagenic Effects	Not suspected of causing genetic defects
Reproductive or developmental	Causes damage through prolonged or repeated exposure.



effects	
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SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity	Very toxic to aquatic life with long-lasting effects Sodium Iodide - LC50: = 3780 mg/L, 96h static (Oncorhynchus mykiss) <u>Acute Toxicity</u> EC50 - 1.27 mg/l - aquatic invertebrates – ECHA - 48 h LC50 >100 mg/l fish - ECHA - 96 h
Persistence/Degradability	Soluble in water Persistence is unlikely based on 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 ➤ This material and its container must be disposed of as hazardous waste
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SECTION 14 – TRANSPORT INFORMATION

Labels required

	
Marine Pollutant	Yes

Land transport (ADG)

UN Number	3077
Packing group	III
UN proper shipping name	Environmentally hazardous substances, solid, n.o.s
Environmental hazard	Yes
Transport hazard classes	Class 9 (fish and tree)
Special precautions for user	No data available

Air transport (ICAO-IATA / DGR)

UN Number	3077
Packing group	III
UN proper shipping name	Environmentally hazardous substances, solid, n.o.s
Environmental hazard	Yes
Transport hazard classes	Class 9 (Fish and tree)
Special precautions for user	No data available

Sea transport (IMDG / GGVSee)



UN Number	3077
Packing group	III
UN proper shipping name	Environmentally hazardous substances, solid, n.o.s
Environmental hazard	Yes
Transport hazard classes	Class 9 (Fish and tree)
Special precautions for user	Maximum quantity levels may apply

SECTION 15 – REGULATORY INFORMATION

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

GHS Codes	6.1E, 6.5B, 6.9B, 9.1B
National Inventory	Status
Australia – AICS	Yes
Europe – EINEC / ELINCS / NLP	Yes
New Zealand – NZIoC	Yes - All ingredients are on the inventory
Environmental Protection Authority (New Zealand)	Does not have an individual approval but may be used under an appropriate group standard
Approval Code	None

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

