

VETPAK SAFETY DATA SHEET

Section 1: Identification of the Substance or Mixture and of the Supplier

Product Name: Potassium Iodide.

Other Names: Iodide of Potash, KI; Pima; Hydroiodic Acid; Potassium Salt; SSK.

Recommended Use: Reagent in analytical chemistry, Photographic emulsions (precipitating silver), Feed additive, Spectroscopy, Infrared transmission, dietary supplement (up to 0.01% in table salt).

Company Details: Vetpak Ltd.

Address: 249 Bruce Berquist Dr, Te Awamutu 3800.

Telephone Number: (07) 870 2024

Emergency Telephone Number: (0800) 764-766 24 hours. National Poisons Centre, Department of Preventative and Social Medicine, University of Otago, P O Box 913, Dunedin, New Zealand.
(07) 870 2024 Vetpak. 8.00am to 5.00pm Monday to Friday except public holidays.

Date of Preparation: 6th August 2019

Section 2: Hazards Identification

STATEMENT OF HAZARDOUS NATURE

This product is HAZARDOUS IN THIS FORM AND AT THIS STRENGTH.

Handle correctly and as directed by this SDS.

EPA New Zealand approval code: HSR003718

HAZARD LABELLING WARNING



HAZARD CLASSIFICATION AND STATEMENTS

HSNO	HSNO	GHS	Signal Word	GHS Hazard Statement
6.5B	Contact sensitiser	Category 1	Warning	H317 May cause an allergic skin reaction
6.9A	Harmful to human target organs or systems	Category 1	Danger	H370 H372 Causes damage to organs
9.1B	Aquatic toxicity	Category 2	Warning	H411 Toxic to aquatic life

Prevention Statements:

P102: Keep out of reach of children.

P103: Read label before use.

P260: Do not breathe mist/vapours/spray

P261: Avoid breathing dust

P264: Wash hands thoroughly after use.

P270: Do not eat, drink or smoke when handling this product.

P272: Contaminated work clothing should not be allowed out of the workplace.

P273: Avoid release to the environment.

P280: Wear protective gloves / clothing and eye / face protection.

VETPAK SAFETY DATA SHEET

Section 3: Composition / Information on Ingredients:

COMPOSITION

Ingredient	CAS Number	% w/w	HAZARDOUS
Potassium Iodide	7681-11-0	100	Yes 6.5B; 6.9A; 9.1B

Section 4: First Aid Measures:

Description of necessary first Aid measures:

Swallowed: Rinse mouth, then drink plenty of water. Get medical advice/attention if you feel unwell. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

Skin: Immediately flush skin with plenty of water for at least 15 minutes. Do not rub the affected area. Remove contaminated clothing and shoes. Wash clothing before re-use. Thoroughly clean shoes before re-use. Get medical attention if irritation develops.

Eye: 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. Continue rinsing for at least 15 minutes. If eye irritation persists, get medical advice/attention.

Inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If respiratory symptoms persist, get medical advice/attention. Apply resuscitation if victim is not breathing; Administer oxygen if breathing is difficult.

Workplace Facilities: Ensure an eye bath and washroom facilities are available.

Notes for Medical Personnel: Treat symptomatically based on judgement of doctor and individual reactions of patient.

Aggravated medical conditions caused by exposure: Chronic ingestion of iodides may produce iodism which may be characterised by skin rash, running nose, headaches, and irritation of mucus membranes. Weakness, anaemia, loss of weight, and general depression may also occur.

Section 5: Fire Fighting Measures

Type of Hazard: Non-combustible.

Fire Hazard Properties: Fire or heat may produce irritating, toxic and/or corrosive fumes, including potassium oxides, hydrogen iodide.

Extinguishing Media & Methods: If material is involved in a fire, use dry chemical, Carbon dioxide (CO₂), foam or water spray for extinction - Do not use water jets. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Recommended Protective Clothing: Wear self-contained breathing apparatus (SCBA) and chemical splash suit. SCBA and structural firefighter's uniform may provide limited protection. Contain runoff from fire control or dilution water - Runoff may pollute waterways.

Section 6: Accidental Release Methods

Procedures to be covered: Ensure adequate ventilation. Avoid generating dust. Do not breathe dust and avoid contact with eyes, skin and clothing. Use personal protective equipment as required (see SECTION 8). Prevent entry into waterways, drains or confined areas.

Methods and Materials for Containment and Clean Up: Collect material (sweep or vacuum up) and place into a suitable container for later disposal (see SECTION 13). Avoid dispersal of dust in the air (i.e. clearing dust surfaces with compressed air).

VETPAK SAFETY DATA SHEET

Section 7: Handling and Storage

Handling: Ensure an eye bath and wash room facilities are available and ready for use. Ensure adequate ventilation. Minimise dust generation and accumulation. Do not breathe dusts or mists and avoid contact with eyes, skin and clothing. Do not ingest.

Storage: 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).

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.

Section 8: Exposure Controls / Personal Protection

Workplace Exposure Standards: No specific exposure standards are available for this product. For Iodine (CAS No. 7553-56-2):

TWA = 0.1 ppm (1 mg/m³) Peak limitation. (Safe Work Australia Exposure Standard)

TWA = 0.1 ppm (1 mg/m³) Ceiling. (New Zealand WES)

Engineering Controls: A system of local and / or general exhaust is recommended to keep employee exposures below the airborne exposures limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into general work area.

Personal Protective Equipment (PPE):

RESPIRATORY: Dust mask/particulate (P2) filter respirator (refer to AS/NZS 1715 & 1716).

EYE/FACE: Safety glasses; Chemical goggles; Face-shield.

SKIN/BODY: Protective gloves, e.g. nitrile rubber and coveralls.



General hygiene: Wash hands thoroughly after handling. Do not eat, drink or smoke while handling the product. Maintain eye wash and wash room facilities in work area.

Section 9: Physical and Chemical Properties

Appearance (physical state, colour etc.): Colourless, white crystals, solid

Odour: Odourless

pH: 7 – 9

Melting Point/Freezing Point (°C): 680 / No Data

Boiling Point (°C): 1330

Flash Point (°C):

Flammability: Not flammable

Lower Flammability/Explosive Limit:

Upper Flammability/Explosive Limit:

Auto-ignition Temperature (°C):

Vapour Pressure:

Vapour Density:

Relative Density:

VETPAK SAFETY DATA SHEET

Solubility in Water: Very soluble (140gm/100gm in water).

Specific Gravity: 3.1 (water = 1)

Viscosity:

Section 10: Stability and Reactivity

Stability of the Substance: Stable under ordinary conditions of use and storage.

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.

Material to avoid: 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: 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 polymerization: Will not occur.

Section 11: Toxicological Information

Acute Effects:

LD50 = 2779 mg/kg (Rat)

Swallowed: Provokes abdominal pain, nausea and vomiting. After absorption of very large quantities, may cause drop in blood pressure, paralysis symptoms, agitation.

Skin: Harmful in contact with skin. May cause an allergic skin reaction.

Eye: May cause irritation, redness and pain.

Inhaled: May cause irritation to the respiratory tract. Symptoms may include coughing and shortness of breath.

Chronic Effects:

Chronic Toxicity: Causes damage to organs (thyroid) through prolonged or repeated oral exposure.

Irritation/Corrosion: Skin irritation

Carcinogenic Effects: Not listed as carcinogenic

Mutagenic Effects: Not suspected of causing genetic defects

Reproductive or developmental effects: Causes damage through prolonged or repeated exposure

Section 12: Ecological Information

Potential Environmental Considerations: Toxic to aquatic life with long-lasting effects.

Ecotoxicity in water:

LC50, Crustacea (*Daphnia magna*): 2.7 mg/L (48 h).

Persistence and Degradability: Potassium iodide will completely dissociate in water giving potassium ion (K+) and iodide anion (I-). Biodegradation is not applicable for inorganic substances.

Mobility: Expected to have a low potential for adsorption (completely ionized in water phase). Negligible distribution to air due to high water solubility and low vapour pressure.

Bioaccumulation: Not likely.

BOD and COD: No Data

Products of Biodegradation: No Data

VETPAK SAFETY DATA SHEET

Section 13: Disposal Considerations

Disposal Information: Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. Dispose of container in accordance with local government regulations.

Section 14: Transport Information

Hazard Class: 6.5B; 6.9A; 9.1B

UN Number:

Packing Group:

Hazchem Code:

Land Transport: Check regulations

Sea Transport: Check regulations

Air Transport: Check regulations

Other Information:

Section 15: Regulatory Information

HSNO Approval Number: HSR003718

HSNO Classifications:

6.5B (Contact Sensitiser)

6.9A (Harmful to human target organs or systems)

9.1B (Aquatic toxicity)

Regulatory status: EPA New Zealand Approval Number HSR003718

Section 16: Other Information

Interpretation and Abbreviations

Controls applying to a substance:

- * denotes that changes have been made to these controls, further information on these changes is located in the transfer notice for that substance,
- (R) abbreviation for the term Regulation of the Hazardous Substances regulations

AICS – Australian Inventory of Chemical Substances

AOX – Absorbable organic halogens.

APF – Assigned Protection Factor.

BOD – Biochemical Oxygen Demand China

COD – Chemical Oxygen Demand

DSL – Canadian Domestic Substances List.

EC50 – Half maximal effective concentration. The concentration of a toxicant which induces a response halfway between the baseline and maximum after a specified exposure time.

EINECS – European Inventory of Existing Commercial Chemical Substances.

ENCS – Japanese Existing and New Chemical substances.

IARC – International Agency for Research on Cancer.

IDLH – Immediately Dangerous to Life or Health Concentrations.

ISHL – Japanese Industrial Safety and Health Law List of Chemicals.

LOEL – Lowest Observed Effect Level.

LD⁵⁰ – Lethal Dose sufficient to kill 50 percent of the test population within a certain time

LD_{LO} – Lethal Dose Low (the lowest dosage per unit of bodyweight of a substance known to have resulted in fatality in a particular animal species).

VETPAK SAFETY DATA SHEET

MAK – Maximum workplace concentration in the workplace air that generally does not have known adverse effects on the health of the employee nor cause unreasonable annoyance when a person is repeatedly exposed during long periods, usually 8 hours daily, 40hour working week).

NOAA – National Oceanic and Atmospheric Administration.

NOEC – No Observed Effect Concentration.

NTP – National Toxicology Program.

NZIoC – New Zealand Inventory of Chemicals.

OECD HPV – The Organisation for Economic Co-operation and Development High Product Volume Chemicals.

PEL – Permissible exposure limit.

PPE – Personal Protective Equipment.

Prop 65 – California Proposition 65 List of Chemicals.

RTECS – Registry of Toxic Effects of Chemical substances

STEL – Short term exposure limit.

TOC – Total Organic Carbon.

TSCA – US Toxic Substances Control Act Existing Chemicals.

TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

VOC – Volatile Organic Compounds.

Date of Preparation/Review: 6 August 2019

Sources of key data used to compile the datasheet:

Manufacturers SDS: Redox, Potassium iodide, Revision 4, Date 01 Oct 2016

NZ EPA CCID

Health and Safety at Work (Hazardous Substances) Regulations 2017

Hazardous Substances (Minimum Degrees of Hazard) Notice 2017

Hazardous Substances (Safety Data Sheets Notice 2017

Hazardous Substances (Classification) Notice 2017

Labelling of Hazardous Substances Technical Guide 2012

DISCLAIMER

The information contained in this safety data sheet was obtained from current and reliable sources.

This data is supplied without warranty, expressed or implied, regarding its correctness and accuracy.

It is the user's responsibility to determine safe conditions for use of this product and to assume liability for loss, injury, damage or expense resulting from improper use of this product.

END OF SDS