



SAFETY DATA SHEET POTASSIUM IODIDE STABILIZED REVISION 5, DATE 28 JUL 21

1. IDENTIFICATION

Product Name	Potassium Iodide Stabilized
Other Names	No Data Available
Uses	Industrial use.
Chemical Family	No Data Available
Chemical Formula	Unspecified
Chemical Name	Potassium iodide stabilized with Calcium stearate
Product Description	No Data Available

Contact Details of the Supplier of this Safety Data Sheet

Organisation	Location	Telephone
Redox Ltd	2 Swettenham Road Minto NSW 2566 Australia	+61-2-97333000
Redox Ltd	11 Mayo Road Wiri Auckland 2104 New Zealand	+64-9-2506222
Redox Inc.	3960 Paramount Boulevard Suite 107 Lakewood CA 90712 USA	+1-424-675-3200
Redox Chemicals Sdn Bhd	Level 2, No. 8, Jalan Sapir 33/7 Seksyen 33, Shah Alam Premier Industrial Park 40400 Shah Alam Sengalor, Malaysia	+60-3-5614-2111

Emergency Contact Details

For emergencies only; DO NOT contact these companies for general product advice.

Organisation	Location	Telephone
Poisons Information Centre	Westmead NSW	1800-251525 131126
Chemcall	Australia	1800-127406 +64-4-9179888
Chemcall	Malaysia	+64-4-9179888
Chemcall	New Zealand	0800-243622 +64-4-9179888
National Poisons Centre	New Zealand	0800-764766
CHEMTREC	USA & Canada	1-800-424-9300 CN723420 +1-703-527-3887

2. HAZARD IDENTIFICATION

Poisons Schedule (Aust)

Not Scheduled



Globally Harmonised System

Hazard Classification Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

Hazard Categories Specific Target Organ Toxicity (Repeated Exposure) - Category 1

Pictograms



Signal Word Danger

Hazard Statements **H372** Causes damage to organs through prolonged or repeated exposure.

Precautionary Statements

Prevention	P260	Do not breathe dusts or mists.
	P264	Wash hands thoroughly after handling.
	P270	Do not eat, drink or smoke when using this product.
Response	P314	Get medical attention if you feel unwell.
Disposal	P501	Dispose of contents/container in accordance with local / regional / national / international regulations.

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

HSNO Classifications Health Hazards **6.9A** Substances that are toxic to human target organs or systems

3. COMPOSITION/INFORMATION ON INGREDIENTS**Ingredients**

Chemical Entity	Formula	CAS Number	Proportion
Potassium iodide	KI	7681-11-0	90 %
Calcium estearate	Unspecified	1592-23-0	10 %

4. FIRST AID MEASURES**Description of necessary measures according to routes of exposure**

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

Eye IF IN EYES: 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.

Skin	IF ON SKIN: Do not rub the affected area! Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs, get medical advice/attention.
Inhaled	IF INHALED: Remove victim to fresh air and keep warm and at rest in a position comfortable for breathing. If respiratory symptoms persist, get medical advice/attention. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult.
Advice to Doctor	Get medical advice/attention if you feel unwell. Treat symptomatically. Show this safety data sheet (SDS) to the doctor in attendance.
Medical Conditions Aggravated by Exposure	Sensitisation possible in predisposed persons.

5. FIRE FIGHTING MEASURES

General Measures	If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out. Dike fire-control water for later disposal.
Flammability Conditions	Not flammable.
Extinguishing Media	Use dry chemical, Carbon dioxide (CO ₂), foam or water spray for extinction. Do not scatter spilled material with high-pressure water streams. *Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Fire and Explosion Hazard	Ambient fire may liberate hazardous vapours. Vapours may be denser than air and tend to accumulate in low or confined areas such as sewers and basements. Containers may explode if heated.
Hazardous Products of Combustion	Fire may produce irritating and/or toxic fumes, including Hydrogen iodide, Potassium oxides, Carbon oxides.
Special Fire Fighting Instructions	Contain runoff from fire control or dilution water - Runoff may cause pollution.
Personal Protective Equipment	Wear positive pressure self-contained breathing apparatus (SCBA) and chemical splash suit. SCBA and structural firefighter's uniform may provide limited protection.
Flash Point	No Data Available
Lower Explosion Limit	No Data Available
Upper Explosion Limit	No Data Available
Auto Ignition Temperature	No Data Available
Hazchem Code	No Data Available

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	Ensure adequate ventilation. ELIMINATE all ignition sources (if dust clouds can occur). Do not touch or walk through spilled material - Slippery when spilt. Avoid accidents, clean up immediately! Avoid generating dust. Do not breathe dust and avoid contact with eyes, skin and clothing.
Clean Up Procedures	Sweep or vacuum up, but avoid generating dust. Collect and seal in properly labelled containers for disposal (see SECTION 13).
Containment	Stop leak if safe to do so – Prevent entry into waterways, drains or confined areas. Prevent dust cloud.
Decontamination	Wash area down with excess water.
Environmental Precautionary Measures	Prevent entry into drains and waterways.
Evacuation Criteria	Spill or leak area should be isolated immediately. Keep unauthorised personnel away.
Personal Precautionary Measures	Wear protective equipment to prevent skin and eye contact and breathing in dust (see SECTION 8).

7. HANDLING AND STORAGE

Handling	Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Minimise dust generation and accumulation. Do not breathe dust/mist/vapours and avoid contact with eyes, skin and clothing. Do not ingest. Wear protective equipment to prevent skin and eye contact and breathing in dust (see SECTION 8). Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres.
Storage	Store in a cool, dry and well-ventilated place, protected from direct sunlight. Keep container tightly closed - check regularly for spills. Keep away from water or moist air. Keep away from heat and sources of ignition - No smoking. Keep away from foodstuffs and incompatible materials (see SECTION 10).
Container	Keep in the original container or packaging materials similar to the original.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	<p>No specific exposure standards are available for this product. For dusts from solid substances without specific occupational exposure standards:</p> <ul style="list-style-type: none"> - Safe Work Australia Exposure Standard (Nuisance dusts): 8 hr TWA = 10 mg/m³ (measured as inhalable dust). - New Zealand WES (Particulates not otherwise classified): TWA = 10 mg/m³; TWA = 3 mg/m³ (respirable dust). <p>COMPONENT: Iodine (CAS No. 7553-56-2):</p> <ul style="list-style-type: none"> - Safe Work Australia Exposure Standard: TWA = 0.1 ppm (1 mg/m³) Peak limitation. - New Zealand Workplace Exposure Standard [Adopted 2022]: TWA = 0.01 ppm (0.05 mg/m³); Ceiling = 0.1 ppm (1 mg/m³).
Exposure Limits	No Data Available
Biological Limits	No information available.
Engineering Measures	A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. 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.
Personal Protection Equipment	<ul style="list-style-type: none"> - Respiratory protection: In case of inadequate ventilation, wear respiratory protection. Recommended: Use respiratory protective equipment against dust. In cases of high potential of exposure, use a supplied-air respirator, full facepiece, operated in positive pressure mode or self-contained breathing apparatus (SCBA). - Eye/face protection: Wear appropriate eye protection to avoid eye contact. Recommended: Use chemical safety goggles and/or a full face shield where dusting or splashing of solutions is possible. - Hand protection: Handle with gloves. Recommended: Wear impervious protective gloves. - Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Wear clean body-covering clothing, e.g. Overalls, Safety shoes.
Special Hazards Precautions	No information available.
Work Hygienic Practices	Do not eat, drink or smoke when using this product. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	Crystals
Odour	Odourless
Colour	White
pH	7.0 - 9.0 (5% solution)
Vapour Pressure	No Data Available
Relative Vapour Density	No Data Available

Boiling Point	1,330 °C
Melting Point	680 °C
Freezing Point	680 °C
Solubility	Soluble in water and ethanol
Specific Gravity	3.1 (Water = 1)
Flash Point	No Data Available
Auto Ignition Temp	No Data Available
Evaporation Rate	No Data Available
Bulk Density	No Data Available
Corrosion Rate	No Data Available
Decomposition Temperature	No Data Available
Density	No Data Available
Specific Heat	No Data Available
Molecular Weight	No Data Available
Net Propellant Weight	No Data Available
Octanol Water Coefficient	logKow = 0.04 (Potassium iodide)
Particle Size	No Data Available
Partition Coefficient	No Data Available
Saturated Vapour Concentration	No Data Available
Vapour Temperature	No Data Available
Viscosity	No Data Available
Volatile Percent	0% @ 21°C
VOC Volume	No Data Available
Additional Characteristics	No information available.
Potential for Dust Explosion	Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.
Fast or Intensely Burning Characteristics	No information available.
Flame Propagation or Burning Rate of Solid Materials	No information available.
Non-Flammables That Could Contribute Unusual Hazards to a Fire	No information available.
Properties That May Initiate or Contribute to Fire Intensity	Not flammable.
Reactions That Release Gases or Vapours	Fire/decomposition may produce irritating and/or toxic fumes, including Hydrogen iodide, Potassium oxides, Carbon oxides.
Release of Invisible Flammable Vapours and Gases	Inflammation or inflammable gas or vapours risk in contact with fluor.

10. STABILITY AND REACTIVITY

General Information	Explosion hazard in contact with alkaline brass, ammoniac, halogen-halogen compounds and hydrogen peroxide. Exothermic reaction with oxidizers. Inflammation or inflammable gas or vapours risk in contact with fluor.
Chemical Stability	Product stable under normal conditions of temperature and pressure.
Conditions to Avoid	Avoid generating dust. Keep away from heat and sources of ignition. Avoid exposure to air, moisture, light.
Materials to Avoid	Incompatible/reactive with strong oxidising agents, acids, metal salts, potassium chlorate, perchlorates, diazonium salts, tartaric acid, metals, bromine and chlorine trifluorides.

Hazardous Decomposition Products

Fire/decomposition may produce irritating and/or toxic fumes, including Hydrogen iodide, Potassium oxides, Carbon oxides.

Hazardous Polymerisation

Hazardous polymerisation will not occur.

11. TOXICOLOGICAL INFORMATION**General Information**

- Acute toxicity: Product not classified as acute toxic by oral route. It is not expected that the product presents acute toxicity by dermal and inhalation route.
- Skin corrosion/irritation: It is not expected that the product causes skin irritation. Repeated or prolonged skin contact may lead to allergic contact dermatitis.
- Eye damage/irritation: It is not expected that the product causes eye irritation. Exposure to the dust may cause discomfort due to particulate nature. May cause physical irritation to the eyes.
- Respiratory/skin sensitisation: It is not expected that the product causes respiratory or skin sensitisation. Sensitisation possible in predisposed persons.
- Germ cell mutagenicity: It is not expected that the product presents germ cell mutagenicity.
- Carcinogenicity: It is not expected that the product presents carcinogenicity.
- Reproductive toxicity: It is not expected that the product presents reproductive toxicity.
- STOT (single exposure): It is not expected that the product presents specific target organ toxicity by single exposure. Breathing in dust may result in respiratory irritation.
- STOT (repeated exposure): Causes damage to Thyroid through prolonged or repeated exposure if swallowed. Prolonged or repeated contact may result in hypothyroidism and thyroid gland hyperplasia. Prolonged or repeated exposure may cause headache, weakness, anemia, goiter, iodism (salivation, weakness, sneezing, lacrimation) and central nervous system depression.
- Aspiration toxicity: It is not expected that the product presents an aspiration hazard.

Acute**Ingestion**

- Acute toxicity (Oral):
- Acute toxicity estimate (ATE): >5,000 mg/kg [Supplier's SDS].

Carcinogen Category

None

12. ECOLOGICAL INFORMATION**Ecotoxicity**

- Aquatic toxicity:
- COMPONENT: Potassium iodide (CAS No. 7681-11-0):
- EC50, Crustacea (Daphnia magna): 7.5 mg/L (48 h).

Persistence/Degradability

The methods for determining the biological degradability are not applicable to inorganic substances.

Mobility

No information available.

Environmental Fate

Prevent entry into drains and waterways.

Bioaccumulation Potential

It is not expected that the product presents bioaccumulative potential in aquatic organisms.

Environmental Impact

No Data Available

13. DISPOSAL CONSIDERATIONS**General Information**

Should be disposed of as hazardous waste in compliance with local regulations. Keep the product remains in its original and properly closed container.

Special Precautions for Land Fill

Do not reuse empty containers. These may contain product residues and should be kept closed and sent for proper disposal as established for the product.

14. TRANSPORT INFORMATION**Land Transport (Australia)**

ADG Code

Proper Shipping Name	Potassium Iodide Stabilized
Class	No Data Available
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Land Transport (Malaysia)

ADR Code

Proper Shipping Name	Potassium Iodide Stabilized
Class	No Data Available
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Land Transport (New Zealand)

NZS5433

Proper Shipping Name	Potassium Iodide Stabilized
Class	No Data Available
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Land Transport (United States of America)

US DOT

Proper Shipping Name	Potassium Iodide Stabilized
Class	No Data Available
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available

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Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Sea Transport

IMDG Code

Proper Shipping Name	Potassium Iodide Stabilized
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
EMS	No Data Available
Marine Pollutant	No
Comments	NON-DANGEROUS GOODS: Not regulated for SEA transport.

Air Transport

IATA DGR

Proper Shipping Name	Potassium Iodide Stabilized
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for AIR transport.

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification	NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)
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15. REGULATORY INFORMATION

General Information	No Data Available
Poisons Schedule (Aust)	Not Scheduled

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code	HSR002503 HSR003718 (Revoked)
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National/Regional Inventories

Australia (AIIIC)	Listed
Canada (DSL)	Not Determined
Canada (NDSL)	Not Determined
China (IECSC)	Not Determined
Europe (EINECS)	231-659-4
Europe (REACH)	Not Determined
Japan (ENCS/METI)	Not Determined
Korea (KECI)	Not Determined
Malaysia (EHS Register)	Not Determined
New Zealand (NZIoC)	Listed
Philippines (PICCS)	Not Determined
Switzerland (Giftliste 1)	Not Determined
Switzerland (Inventory of Notified Substances)	Not Determined
Taiwan (NCSR)	Not Determined
USA (TSCA)	Not Determined

16. OTHER INFORMATION

Related Product Codes	POIODI1500, POIODI1600, POIODI1890, POIODI2000, POIODI2001, POIODI2002, POIODI2500, POIODI6000
Revision	5
Revision Date	28 Jul 2021
Key/Legend	<p>< Less Than</p> <p>> Greater Than</p> <p>AICS Australian Inventory of Chemical Substances</p> <p>atm Atmosphere</p> <p>CAS Chemical Abstracts Service (Registry Number)</p> <p>cm² Square Centimetres</p> <p>CO₂ Carbon Dioxide</p> <p>COD Chemical Oxygen Demand</p> <p>deg C (°C) Degrees Celcius</p> <p>EPA (New Zealand) Environmental Protection Authority of New Zealand</p> <p>deg F (°F) Degrees Farenheit</p> <p>g Grams</p> <p>g/cm³ Grams per Cubic Centimetre</p> <p>g/l Grams per Litre</p> <p>HSNO Hazardous Substance and New Organism</p> <p>IDLH Immediately Dangerous to Life and Health</p> <p>immiscible Liquids are insoluable in each other.</p> <p>inHg Inch of Mercury</p> <p>inH₂O Inch of Water</p> <p>K Kelvin</p> <p>kg Kilogram</p> <p>kg/m³ Kilograms per Cubic Metre</p>

lb Pound

LC50 LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.

LD50 LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.

ltr or **L** Litre

m³ Cubic Metre

mbar Millibar

mg Milligram

mg/24H Milligrams per 24 Hours

mg/kg Milligrams per Kilogram

mg/m³ Milligrams per Cubic Metre

Misc or **Miscible** Liquids form one homogeneous liquid phase regardless of the amount of either component present.

mm Millimetre

mmH₂O Millimetres of Water

mPa.s Millipascals per Second

N/A Not Applicable

NIOSH National Institute for Occupational Safety and Health

NOHSC National Occupational Health and Safety Commission

OECD Organisation for Economic Co-operation and Development

Oz Ounce

PEL Permissible Exposure Limit

Pa Pascal

ppb Parts per Billion

ppm Parts per Million

ppm/2h Parts per Million per 2 Hours

ppm/6h Parts per Million per 6 Hours

psi Pounds per Square Inch

R Rankine

RCP Reciprocal Calculation Procedure

STEL Short Term Exposure Limit

TLV Threshold Limit Value

tne Tonne

TWA Time Weighted Average

ug/24H Micrograms per 24 Hours

UN United Nations

wt Weight