

## 1. Product and Company Identification

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Product Name Potassium Iodide Crystal  
Part Number RXSOL-60-6220-025

### Company Details:

RX MARINE INTERNATIONAL  
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## 2. Composition / Information on ingredients

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Name of Substance	% Composition	Cas Number	EC Number	Molecular Formula	Molar Mass
Potassium Iodide	>99	7681-11-0	231-659-4	KI	166.01g/mol

## 3. Hazards Identification

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Signal Word Oxidizer  
Hazard Statements H272 May intensify fire; oxidizer.  
H318 Causes serious eye damage.  
Precautionary statements - prevention P221 Take any precaution to avoid mixing with combustibles, heavy-metal compounds, acids and alkalis  
Potential Acute Health Effects: Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Prolonged exposure may result in skin burns and ulcerations. Over-exposure by inhalation may cause respiratory irritation.  
Potential Chronic Health Effects: CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to kidneys, liver, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage.

## 4. First Aid Measures

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General Note Irritation and corrosion, respiratory arrest, Cyanosis, Stomach/intestinal disorders, collapse Risk of serious damage to eyes.  
Eye Contact Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.  
Skin Contact In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.  
Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration.

Ingestion:

If breathing is difficult, give oxygen. Get medical attention.

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

## 5. Fire-fighting Measures

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Flammability

Not-flammable.

Flash Point

Not applicable.

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Hazardous combustion products

Not available.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available. Slightly explosive in presence of metals.

Protective Equipment

Use personal protective equipment.

Special Remark on Fire Hazard

It is an oxidizer. It can start a fire in presence of combustible or flammable materials. When heated to decomposition it emits very toxic fumes.

Advice for firefighters

Special protective equipment for firefighters:  
Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

Further information:

Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

## 6. Accidental Release Measures

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Small Spillage

Use appropriate tools to put the spilled solid in a convenient waste disposal container.

Personal Protection

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

Environmental Precaution

Keep away from drains, surface and ground water.

Methods and materials for containment and cleaning

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts

## 7. Handling and Storage

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Handling

Keep away from heat. Keep away from sources of ignition. Keep away from combustible material. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible. Avoid contact with skin and eyes. Keep away from incompatibles such as reducing agents, combustible materials.

Storage

Keep container tightly closed. Keep container in a cool, well-ventilated area. Separate from acids, alkalis, reducing agents and combustibles. See NFPA 43A, Code for the Storage of Liquid and Solid Oxidizers.

Advice on general occupational hygiene

Wash hands after use. Do not to eat, drink and smoke in work areas.

Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

## 8. Exposure controls and personal protection

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Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection

Face shield. Full suit. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves. Boots. Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:

Not Available

Other Protection Measure

Respiratory protection required when dusts are generated. Recommended Filter type: Filter P 2 (acc. to DIN 3181) for solid and liquid particles of harmful substances. The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.



Gloves Suit

## 9. Physical and chemical properties

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Form	Solid (Crystals solid. Crystalline powder.)
Colour	White
Odour	Odorless
Odour Threshold	Not Available
pH	ca. 6 at 50 g/l 20 °C
Boiling Point	Not Applicable
Melting Point	560°C
Flash Point	Dose not flush
Flammability (solid, gas)	The Product is not flammable
Explosive limits	Not Applicable
Vapour pressure	Not Applicable
Density	3.98 g/cm <sup>3</sup> at 20 °C
Relative density Information	Not Determine
Bulk density	ca.2,000 kg/m <sup>3</sup>
Soluble in water	92 g/l at 25 °C

Partition coefficient	Not Applicable
Explosive properties	None
Oxidising properties	Oxidiser

## 10. Stability and reactivity

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Recativity	Oxidisable substances, combustible substances, Powdered metals, Sulphides, phosphorus, sulfur, Alkali metals, hydrides, Cyanides, arsenic, carbon/soot, Alkaline earth metals, powdered aluminium, metallic oxides, Isocyanates, Reducing agents
Stability	Product is stable.
Conditions to avoid	Ignition sources, dust generation.
Incompatible materials	Reactive with reducing agents, combustible materials, organic materials, metals.
Hazardous combustion products	In the event of fire: See section 5.
Polymerization	Will not occur.

## 11. Toxicological information

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Acute toxicity	Acute Oral toxicity : Symptoms: Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract. Acute inhalation toxicity : Symptoms: Possible damages:, mucosal irritations. Symptoms: Possible damages:, mucosal irritations
Skin irritation	Rabbit Result: No irritation OECD Test Guideline 404
Eye damage/eye irritation	Rabbit Risk of permanent damage due to staining of the cornea. Causes serious eye irritation.
Respiratory or skin sensitisation	Sensitisation possible in predisposed persons.
Specific target organ toxicity (STOT)	Single exposure This information is not available.
Aspiration hazard	This information is not available
Other information	After absorption: Stomach/intestinal disorders, collapse, respiratory arrest, Cyanosis Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

## 12. Ecological information

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Toxicity	Toxicity to daphnia and other aquatic invertebrates EC50 Daphnia magna (Water flea): > 100 mg/l; 48 h OECD Test Guideline 202
Process of degradability	The methods for determining the biological degradability are not applicable to inorganic substances.
Bioaccumulative potential	Partition coefficient: n-octanol/water
Mobility in soil	No information available
Results of PBT and vPvB assessment	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
Other adverse effects	Discharge into the environment must be avoided.

## 13. Disposal considerations

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Waste treatment Method

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

## 14. Transport information

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Transport of dangerous goods by road , rail and inland waterway (ADR/RID/ADN)

UN Number	1479
Proper shipping name	OXIDIZING SOLID, N.O.S. (POTASSIUM IODIDE)
Class	5.1
Packing group	II
Tunnel restriction code	E

International Maritime Dangerous Goods Code (IMDG)

UN Number	1479
Proper shipping name	OXIDIZING SOLID, N.O.S. (POTASSIUM IODIDE)
Class	5.1
Packing group	II
EmS	F-A, S-Q

International Civil Aviation Organization (ICAO-IATA/DGR)

UN Number	1479
Proper shipping name	OXIDIZING SOLID, N.O.S. (POTASSIUM IODIDE)
Class	5.1
Packing group	II
Special Precaution for user	No

## 15. Regulatory information

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Federal and State Regulation

TSCA 8(b) inventory: Potassium iodate

Other Regulation

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

WHMIS (Canada)

CLASS C: Oxidizing material.

DSCL (EEC)

R8- Contact with combustible material may cause fire. R22- Harmful if swallowed. R36/38- Irritating to eyes and skin. S2- Keep out of the reach of children. S17- Keep away from combustible material. S46- If swallowed, seek medical advice immediately and show this container or label.

HMIS

Health Hazard: 2  
Fire Hazard: 0  
Reactivity: 1  
Personal Protection: E

National Fire Protection Association (U.S.A.)

Health: 2  
Flammability: 0  
Reactivity: 0  
Specific hazard:

Protective Equipment

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

Full text of R-Phrases

H272 May intensify fire; oxidizer.

H318 Causes serious eye damage.x

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