



LABORATORY CHEMICALS AND CONSUMABLES

MATERIAL SAFETY DATA SHEET

POTASSIUM IODIDE

1. Chemical Product and Company information.

Product name: Potassium Iodide

Contact Information:

Radchem cc
PO Box 166982
Brackendowns
Alberton 1454
Telephone : **011 867 3726 / 2864**

2. Hazard Identification

Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

3. Composition / information on ingredients

CAS #: 7681-11-0

Synonym:

Chemical Name: Potassium Iodide

Chemical Formula: KI

4. First Aid Measures

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 if irritation occurs.

Skin Contact: Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.

Serious Skin Contact: Not available

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available

Ingestion: 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.

Serious Ingestion: Not available

5. Fire-fighting measures

Flammability of the Product: Non-flammable.

Fire Hazards in Presence of Various Substances: Not applicable

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.

Fire Fighting Media and Instructions: Not applicable

Special Remarks on Fire Hazards: Not available

Special Remarks on Explosion Hazards: Potassium iodide + Fluorine Perchlorate will explode on contact

6. Accidental release measures

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill: Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

7. Handling and storage

Precautions: Do not breathe dust. Wear suitable protective clothing. If you feel unwell, seek medical attention and show the label when possible. Keep away from incompatibles such as oxidizing agents, reducing agents, metals, acids, moisture.

Storage: Moisture Sensitive. Light Sensitive. Air Sensitive Keep container tightly closed in light-resistant containers. Keep container in a cool, well-ventilated area.

8. Exposure controls/personal protection

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: Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill: Splash goggles. Full suit. Dust 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.

9. Physical and chemical properties

Physical state and appearance: Solid (Deliquescent crystals solid)

Odour: Odourless

Odour Threshold: Not available

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water,



<p>Taste: Bitter, Saline (Strong)</p> <p>Colour: White</p> <p>Boiling Point: 1330°C</p> <p>Melting Point: 681°C</p> <p>Critical Temperature: Not available</p> <p>Specific Gravity: 3.1 (Water = 1)</p> <p>Vapour Density: Not available</p> <p>Volatility: Not available</p>	<p>methanol, acetone</p> <p>Solubility: Easily soluble in cold water, hot water. Soluble in methanol. Partially soluble in acetone</p>
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10. Stability and reactivity

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Light, moisture, incompatible materials. It is stable under ordinary conditions of use and storage. On long exposure to air, it becomes yellow due to release of iodine.

Incompatibility with various substances: Reactive with oxidizing agents, reducing agents, organic materials, metals, acids

Corrosivity: Corrosive in presence of steel, of aluminium, of zinc. Non-corrosive in presence of glass, of copper, of stainless steel (304), of stainless steel (316).

Special Remarks on Reactivity: Moisture Sensitive. Light Sensitive. Air Sensitive. Air causes decomposition to iodine. Reacts violently with strong oxidizers, bromotrifluorides, chlorotrifluorides, fluorine perchlorate, metallic salts. Attacks metals in moist environments. Also incompatible with salts of alkaloids, chloral hydrate, calomel (mercurous chloride), potassium chlorate, tartaric and other acids, oxidants, diazonium salts, charcoal, ozone, strong reducers, alkali metals, metals (brass, aluminium magnesium, zinc, cadmium, copper, tin, nickel, steel), metallic salts, organic materials, light.

Special Remarks on Corrosivity: Incompatible with water, producing a corrosive. Corrosive in all concentrations to most metals, except stainless steel, titanium, and tantalum.

Polymerization: Will not occur.

11. Toxicological information

Routes of Entry: Inhalation. Ingestion

Toxicity to Animals: LD50: Not available. LC50: Not available

Chronic Effects on Humans: MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female, Development toxin [POSSIBLE]. May cause damage to the following organs: thyroid.

Other Toxic Effects on Humans: Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation

Special Remarks on Toxicity to Animals: Lowest Published Lethal Dose: LDL [Mouse] - Route: Oral; Dose: 1862 mg/kg LDL[Rabbit] - Route: Oral; Dose: 916 mg/kg



Special Remarks on Chronic Effects on Humans: Can cause adverse reproductive effects and birth defects based on animal data. May affect genetic material based on animal data

Special Remarks on other Toxic Effects on Humans: Acute Potential Health Effects: Skin: May cause skin irritation. Eyes: May cause eye irritation. Inhalation: May cause respiratory tract and mucous membrane irritation and a productive cough. May cause pulmonary oedema and inflammation of the tonsils. Ingestion: Causes gastrointestinal tract irritation with nausea, vomiting and diarrhoea. May affect behaviour (somnolence, muscle weakness), respiration (dyspnoea). Serum-sickness type of hypersensitivity such as fever, arthralgia, lymph node enlargement, and eosinophilia may appear. Thrombotic thrombocytopenic purpura, and fatal periarteritis nodosa attributed to hypersensitivity to iodide has been described. Chronic Potential Health Effects: Can lead to iodism characterized by salivation, nasal discharge, sneezing, conjunctivitis, fever, headache, laryngitis, bronchitis, stomatitis, parotitis, anaemia, and skin rashes. Chronic ingestion may also affect metabolism (anorexia), and thyroid gland (hypothyroidism, goitre). Furthermore, chronic ingestion of iodides (in animals) during pregnancy has resulted in foetal deaths, severe goitre and cretinoid appearance of the newborn.

12. Ecological information

Ecotoxicity: Not available

BOD5 and COD: Not available

Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.

Special Remarks on the Products of Biodegradation: Not available

13. Disposal considerations

Waste Disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

14. Transport information

DOT Classification: Not a DOT controlled material

Identification: : Not applicable

Special Provisions for Transport: Not available

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