



# PURITAN PRODUCTS

Effective Date: 07/01/13  
Replaces Revision: 02/03/09

NON-EMERGENCY TELEPHONE  
610-866-4225

24-HOUR CHEMTREC EMERGENCY TELEPHONE  
800-424-9300

## SDS – SAFETY DATA SHEET

### 1. Identification

**Product Identifier:** POTASSIUM IODIDE

**Synonyms:** Potide, Hydriodic Acid, Potassium Salt, Iodic Acid, Potassium Salt

**Chemical Formula:** KI

**Recommended Use of the Chemical and Restrictions On Use:** Laboratory Reagent

**Manufacturer / Supplier:** Puritan Products; 2290 Avenue A, Bethlehem, PA 18017 **Phone:** 610-866-4225

**Emergency Phone Number:** 24-Hour Chemtrec Emergency Telephone 800-424-9300

### 2. Hazard(s) Identification

**Classification of the Substance or Mixture:**

Acute toxicity, Oral (Category 4)

Skin irritation (Category 2)

Eye irritation (Category 2A)

**Risk Phrases:**

R22: Harmful if swallowed.

R36/R38: Irritating to eyes and skin.

**Label Elements:**

**Trade Name:** POTASSIUM IODIDE

**Signal Word:** Warning



**Hazard Statements:**

H302: Harmful if swallowed.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

**Precautionary Statements:**

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

### 3. Composition / Information on Ingredients

**CAS Number:** 7681-11-0  
**EC Number:** 231-659-4  
**Molecular Weight:** 166.0 g/mol

Ingredient	CAS Number	EC Number	Percent	Hazardous	Chemical Characterization
Potassium Iodide	7681-11-0	231-659-4	90 - 100%	Yes	Substance

### 4. First-aid Measures

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

**Ingestion:** Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person.

**Skin Contact:** Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention if irritation develops. Wash clothing before reuse. Thoroughly clean shoes before reuse.

**Eye Contact:** Immediately flush eyes with gentle but large stream of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention if irritation persists.

### 5. Fire-fighting Measures

**Fire:** Not considered to be a fire hazard.

**Explosion:** Not considered to be an explosion hazard.

**Fire Extinguishing Media:** Use any means suitable for extinguishing surrounding fire.

**Special Information:** In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

### 6. Accidental Release Measures

**Personal Precautions, Protective Equipment and Emergency Procedures:** Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8.

**Environmental Precautions and Methods and Materials for Containment and Cleaning Up:** Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

### 7. Handling and Storage

**Precautions for Safe Handling and Conditions for Safe Storage, Including Any Incompatibilities:** Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances. Prolonged storage is not recommended because of possible degradation problems, including yellowing of the potassium iodide product. Always inspect the potassium iodide's color and overall quality before use. Containers of this material may be hazardous when empty since they retain product residues (dust, solids.) Observe all warnings and precautions listed for the product.

### 8. Exposure Controls / Personal Protection

**Airborne Exposure Limits:** ACGIH (TWA) for Iodides: 0.01 ppm for inhalable fraction and vapor.

**Ventilation System:** A system of local and / or general exhaust is recommended to keep employee exposures low. 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. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

**Personal Respirators (NIOSH Approved):** For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerin, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full face positive-pressure, air-supplied respirator. **WARNING:** Air-purifying respirators do not protect workers in Oxygen-deficient atmospheres.

**Skin Protection:** Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

**Eye Protection:** Use chemical safety goggles and / or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

## 9. Physical and Chemical Properties

**Appearance:** White crystals

**Odor:** Odorless

**Odor Threshold:** No information found

**pH:** 7-9

**% Volatiles by volume @ 21C (70F):** 0

**Melting Point:** 680C (1256F)

**Boiling Point / Boiling Range:** 1330C (2426F)

**Flash Point:** No data available

**Evaporation Rate (BuAc=1):** No information found

**Flammability:** Not considered to be a fire hazard

**Upper / Lower Flammability or Explosive Limits:** Not applicable

**Vapor Pressure (mm Hg):** 1 @ 745C (1373F)

**Vapor Density (Air=1):** No information found

**Relative Density:** 3.1

**Solubility:** 140 grams/100 gm in water

**Partition Coefficient: n-octanol / water:** No data available

**Auto-ignition Temperature:** Not applicable

**Decomposition Temperature:** No data available

**Viscosity:** No data available

## 10. Stability and Reactivity

**Reactivity and / or Chemical Stability:** Stable under ordinary conditions of use and storage. On long exposure to air becomes yellow due to release of iodine.

**Possibility of Hazardous Reactions and Conditions to Avoid:** Air, moisture, light, and incompatibles.

**Incompatible Materials:** 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:** Oxides of the contained metal and halogen, possibly also free, or ionic halogen.

## 11. Toxicological Information

**Emergency Overview:** CAUTION! MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT.

**Potential Health Effects:**

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

**Ingestion:** Large oral doses may cause irritation to the gastrointestinal tract.

**Skin Contact:** May cause irritation with redness and pain.

**Eye Contact:** May cause irritation, redness and pain.

**Chronic Exposure:** Chronic ingestion of iodides may produce "iodism," which may be manifested by skin rash, running nose, headache and irritation of mucous membranes. Weakness, anemia, loss of weight, and general depression may also occur.

**Aggravation of Pre-existing Conditions:** No information found.

**Specific Target Organ Toxicity - Single Exposure (Globally Harmonized System:)** No data available.

**Specific Target Organ Toxicity - Repeated Exposure (Globally Harmonized System:)** No data available.

**Numerical Measures of Toxicity:** Cancer Lists: NTP Carcinogen

Ingredient	Known	Anticipated	IARC Category
Potassium Iodide (7681-11-0)	No	No	None

**Acute Toxicity:**

Oral rat LD50: mouse - 1,000 mg/kg

## 12. Ecological Information

**Ecotoxicity:**

Toxicity to fish LC50: *Oncorhynchus mykiss* (rainbow trout) - 2,190 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates: EC50 - *Daphnia* - 2.7 mg/l - 24 h

**Persistence and Degradability:** No data available

**Bioaccumulative Potential:** No data available

**Mobility in Soil:** No data available

**Other adverse effects:** No data available

## 13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

## 14. Transport Information

### Land Transport ADR/RID and GGVS/GGVE (Cross Border / Domestic)

Not regulated

### Maritime Transport IMDG/GGVSea

Not regulated

### Air Transport ICAO-TI and IATA-DGR

Not regulated

## 15. Regulatory Information

### Chemical Inventory Status – Part 1

Ingredient	TSCA	EC	Japan	Australia
Potassium Iodide (7681-11-0)	Yes	Yes	Yes	Yes

### Chemical Inventory Status – Part 2

Ingredient	Korea	Canada		Phil.
		DSL	NDSL	
Potassium Iodide (7681-11-0)	Yes	Yes	No	Yes

### Federal, State & International Regulations - Part 1

Ingredient	SARA 302		SARA 313	
	RQ	TPQ	List Chemical	Catg.
Potassium Iodide (7681-11-0)	No	No	No	No

### Federal, State & International Regulations - Part 2

Ingredient	RCRA		TSCA
	CERCLA	261.33	8(d)
Potassium Iodide (7681-11-0)	No	No	No

<b>Chemical Weapons Convention:</b> No		<b>TSCA 12(b):</b> No		<b>CDTA:</b> No	
<b>SARA 311/312:</b>	<b>Acute:</b> Yes	<b>Chronic:</b> Yes	<b>Fire:</b> No	<b>Pressure:</b> No	
<b>Reactivity:</b> No		Pure / Solid			

**Australian Hazchem Code:** Not classified

**Poison Schedule:** None allocated

## 16. Other Information

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