



**PhytoTechnology  
Laboratories®**

# SAFETY DATA SHEET

## 1. CHEMICAL IDENTIFICATION AND COMPANY INFORMATION

PRODUCT NAME: Potassium Iodide, ACS Reagent  
 PRODUCT NUMBER: P840  
 COMPANY INFO: *PhytoTechnology Laboratories®*  
 PO Box 12205, Shawnee, KS 66282-2205  
 Phone: 1-888-749-8682 or 1-913-341-5343; Fax: 1-888-449-8682 or 1-913-341-5442  
 www.phytotechlab.com

EMERGENCY PHONE NUMBER: 1-800-535-5053 - US Only  
 1-352-323-3500 - International

RECOMMENDED USE: For Research Use Only

RESTRICTIONS ON USE: Products sold by *PhytoTechnology Laboratories®* are intended for research and laboratory use only. Products are not to be used as human or animal therapeutics, cosmetics, agricultural or pesticidal products, food additives, or as household chemicals.

## 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture  
 H302 – Acute toxicity, Oral (Category 4)  
 H315 – Skin irritation (Category 2)  
 H319 – Eye irritation (Category 2A)

GHS Label elements, including hazard and precautionary statements:



Signal Word: **Warning**

Hazard Statements:

H302 – Harmful if swallowed.  
 H315 – Causes skin irritation.  
 H319 – Causes serious eye irritation.

Precautionary Statements:

P280 – Wear protective gloves/protective clothing/eye protection.  
 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 No.: 7681-11-0  
 Formula: KI  
 Molecular Weight: 166.00 g/mol  
 EC No.: 231-659-4

Ingredient	CAS Number	Percent	Hazardous
Potassium Iodide	7681-11-0	>99 %	No exposure limits established by OSHA or ACGIH

## 4. FIRST AID MEASURES

General Advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Route of Entry	Symptoms	First Aid Procedures
Ingestion	May cause irritation if swallowed	If swallowed, wash out mouth with water. Never give anything by mouth to an unconscious person. <b>Get medical attention.</b>

Inhalation	May cause irritation to respiratory tract	Safely remove victim to fresh air. If not breathing, institute cardiopulmonary resuscitation (CPR). If breathing is difficult, ensure clear airway and give oxygen. <b>Get medical attention.</b>
Eye Contact	Direct contact may cause irritation. May cause redness, tearing, or blurred vision.	Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. <b>Get medical attention if irritation persists.</b>
Skin Contact	Irritating. May cause reddening, itching or inflammation.	Wash area thoroughly with soap and water. Remove and wash contaminated clothing. <b>Get medical attention if irritation persists.</b>

Most Important Symptoms or Effects, Both Acute and Delayed:

See section 2 and/or section 11

Recommendation for Immediate Medical Care and Special Treatment Needed:

No data available

**5. FIRE FIGHTING MEASURES**

Suitable Extinguishing Media:	Water spray, carbon dioxide, dry chemical powder, or appropriate foam. Use extinguishing media suitable for surrounding fire.
Special Protective Equipment and Precaution for Firefighters:	In the event of a fire, wear full protective clothing and NIOSH approved self-contained breathing apparatus. Evacuate the area and fight fire from a safe distance.
Hazardous Combustion Products:	May emit toxic fumes under fire conditions.
Toxic Gases Produced:	Hydrogen iodide, Potassium oxides

**6. ACCIDENTAL RELEASE MEASURES**

Personal Precautions, Protective Equipment and Emergency Procedures:

Use personal protection recommended in Section 8. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation, especially in confined areas. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental Precautions:	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Method of Containment and Cleanup:	Wear suitable protective clothing. Avoid dust formation. Carefully sweep up and remove. Place material in a dry container and cover. Remove from the area. Flush spill area with water. Do not let products enter drains.

**7. HANDLING AND STORAGE**

Precaution for Safe Handling:	Avoid contact with skin and eyes. Avoid dust formation and aerosols. Avoid incompatible substances. Wash thoroughly after use.
Conditions for Safe Storage:	Keep in a tightly closed container and store in a cool, dry, and well-ventilated area. Air, light and moisture sensitive.
Incompatibilities:	Strong reducing agents, strong acids, tin, nickel, steel, aluminum, brass, magnesium, zinc, cadmium, copper
Recommended Storage Temperature:	Room Temperature

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

OSHA's Permissible Exposure Limits (PELs):	No data available
ACGIH Threshold Limit Values (TLVs):	0.01 mg/m <sup>3</sup>
Engineering Controls:	Handle in accordance to general industrial hygiene and safety practice.

## Personal Protective Equipment (PPE):

Eye/Face Protection:	Chemical safety glasses or goggles. Have eye-washing facilities readily available where eye contact can occur.
Skin Protection:	Protective gloves
Body Protection:	Lab coat
Respiratory Protection:	Appropriate respirator.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White crystals or powder
pH:	No data available
Solubility:	Soluble in water
Melting Point:	680 °C
Vapor Density:	No data available
Vapor Pressure:	1 hPa (1 mmHg) at 745 °C (1,373 °F)
Odor:	Odorless
Odor Threshold:	No data available
Viscosity:	No data available
Relative Density:	3.130 g/cm <sup>3</sup>
Evaporation Rate:	No data available
Initial Boiling Point and Boiling Range:	1,330 °C (2,426 °F)
Flammability (solid, gas):	No data available
Partition coefficient: n-octanol/water):	No data available
Auto-ignition Temperature:	No data available
Decomposition Temperature:	No data available
Flash Point (Closed Cup):	No data available
Flammable Limits:	Upper (%) – No data available      Lower (%) – No data available

## 10. STABILITY AND REACTIVITY

Reactivity:	No data available
Chemical Stability:	Exposure to air, moisture, or light causes yellowing due to the liberation of iodine.
Possibility of Hazard Reactions:	Will not occur
Conditions to Avoid:	Extreme heat, light, moisture, air
Incompatibles Materials:	Strong reducing agents, strong acids, tin, nickel, steel, aluminum, brass, magnesium, zinc, cadmium, copper
Hazardous Decomposition Products:	Hydrogen iodide, Potassium oxides

## 11. TOXICOLOGICAL INFORMATION

Toxicity:	LD <sub>Lo</sub> (IV-Rat)(mg/Kg)	167
	LD <sub>Lo</sub> (Oral-Mouse)(mg/Kg)	1000
	LD <sub>Lo</sub> (IPR-Mouse)(mg/Kg)	1117
Carcinogenicity:	NTP:	No
	IARC:	No
	Z List:	No
	OSHA Reg:	No

Reproductive Toxicity: Exposure to excessive amounts of iodine during pregnancy is capable of producing fetal hypothyroidism. Iodine containing drugs have been associated with fetal goiter.

Symptoms Associated with Overexposure: Skin rash, running nose, headache and irritation of the mucous membrane. For severe cases the skin may show pimples, boils, hives, blisters and black and blue spots. Iodides are readily diffused across the placenta. Neonatal deaths from respiratory distress secondary to goiter have been reported. Iodides have been known to cause drug-induced fevers, which are usually of short duration.

Specific Target Organ Toxicity: Single Exposure: No data available  
Repeated Exposure: May cause allergic reactions in certain sensitive individuals.

Target Organs: Thyroid, blood, liver

Medical Conditions Aggravated By Exposure: Pregnancy

Routes of Entry: Inhalation, Ingestion, and skin contact

NIOSH/RTECS NO: TT2975000

***The toxicological properties of this product have not been thoroughly investigated***

## 12. ECOLOGICAL INFORMATION

Ecotoxicity: Toxicity to fish - LC50 - *Oncorhynchus mykiss* (rainbow trout) - 2,190 mg/l - 96 h  
Toxicity to daphnia - EC50 - *Daphnia* (water flea) - 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 CONSIDERATION

Disposal Procedure: Dispose in accordance with all applicable federal, state, and local environmental regulations.

EPA Hazardous Waste Number: No data available

## 14. TRANSPORT INFORMATION

Domestic (D.O.T.): Proper Shipping Name: CHEMICALS, N.O.S. (NON-REGULATED)  
Hazard Class: N/A  
UN/NA: N/A  
Labels: N/A

### International:

IMDG: Proper Shipping Name: CHEMICALS, N.O.S. (NON-REGULATED)  
Hazard Class: N/A  
UN/NA: N/A  
Labels: N/A

IATA: Proper Shipping Name: CHEMICALS, N.O.S. (NON-REGULATED)  
Hazard Class: N/A  
UN/NA: N/A  
Labels: N/A

**15. REGULATORY INFORMATION**

TSCA: Yes

SARA TITLE III:

Section 302 (EHS) Ingredients: No

Section 313 Ingredients: No

Section 304 (EHS/CERCLA) Ingredients: No

Section 311/312 Hazard: Acute Health Hazard, Chronic Health Hazard

Massachusetts Right to Know Components: No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right to Know Components: CAS No.: 7681-11-0 Potassium iodide

New Jersey Right to Know Components: CAS No.: 7681-11-0 Potassium iodide

California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**16. OTHER INFORMATION**

HMIS Rating:	<b>Health Hazard</b>	<b>Chronic Health Hazard</b>	<b>Flammability</b>	<b>Physical Hazard</b>
	2	*	0	0
NFPA Rating:	<b>Health Hazard</b>	<b>Fire Hazard</b>	<b>Reactivity Hazard</b>	<b>Special Hazard</b>
	2	0	0	

\*Chronic Hazard: Chronic (long-term) health effects may result from repeated overexposure.

***PhytoTechnology Laboratories®* provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. The above information is intended to be used only as a guide to the appropriate precautionary handling of this material by a properly trained person. *PhytoTechnology Laboratories®* shall not be held liable for any damage resulting from handling or from contact with the above product. This product is intended for LABORATORY USE ONLY. Our products may NOT BE USED as drugs, cosmetics, agricultural or pesticidal products, food additives or as household chemicals.**

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