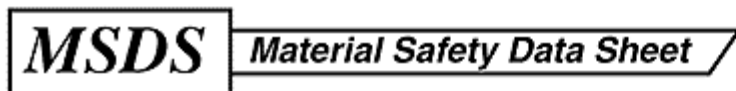


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From: Mallinckrodt Baker, Inc.  
222 Red School Lane  
Phillipsburg, NJ 08865

MALLINCKRODT



24 Hour Emergency Telephone: 908-859-2151  
CHEMTREC: 1-800-424-9300

National Response in Canada  
CANUTEC: 613-996-6666

Outside U.S. and Canada  
Chemtrec: 202-483-7616

NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance.

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# POTASSIUM IODIDE

MSDS Number: P5906 --- *Effective Date: 12/08/96*

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## 1. Product Identification

**Synonyms:** Potide; hydriocic acid, potassium salt; Iodic acid, potassium salt

**CAS No.:** 7681-11-0

**Molecular Weight:** 166.0

**Chemical Formula:** KI

**Product Codes:** J.T. Baker: 3162, 3165, 3168 Mallinckrodt: 1103, 1108, 1112, 1113, 1115, 1117, 1123, 1127, 1200, 1220, 6334, 6336

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## 2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Potassium Iodide	7681-11-0	90 - 100%	Yes

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## 3. Hazards Identification

### Emergency Overview

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

J.T. Baker SAF-T-DATA<sup>(tm)</sup> Ratings (Provided here for your convenience)

---

Health Rating: 2 - Moderate  
Flammability Rating: 0 - None  
Reactivity Rating: 1 - Slight  
Contact Rating: 2 - Moderate  
Lab Protective Equip: GOGGLES; LAB COAT; VENT HOOD; PROPER GLOVES  
Storage Color Code: Orange (General Storage)

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### **Potential Health Effects**

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#### **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.

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## **4. First Aid Measures**

#### **Inhalation:**

Remove to fresh air. Get medical attention for any breathing difficulty.

#### **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. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get

medical attention if irritation develops.

**Eye Contact:**

Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists.

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## 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 facepiece operated in the pressure demand or other positive pressure mode.

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## 6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

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## 7. Handling and Storage

Keep in a tightly closed light-resistant 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.

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## 8. Exposure Controls/Personal Protection

**Airborne Exposure Limits:**

- OSHA Permissible Exposure Limit (PEL): 15 mg/m<sup>3</sup> total dust, 5 mg/m<sup>3</sup> respirable

fraction for nuisance dusts. - ACGIH Threshold Limit Value (TLV): 10 mg/m<sup>3</sup> total dust containing no asbestos and < 1% crystalline silica for Particulates Not Otherwise Classified (PNOC).

**Ventilation System:**

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. 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):**

If the exposure limit is exceeded, a half-face dust/mist respirator may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece dust/mist respirator may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. **WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

**Skin Protection:**

Gloves and lab coat, apron or coveralls.

**Eye Protection:**

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

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## 9. Physical and Chemical Properties

**Appearance:**

White crystals.

**Odor:**

Odorless.

**Solubility:**

140 grams/100 gm in water.

**Density:**

3.1

**pH:**

7-9

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

0

**Boiling Point:**

1330C (2426F)

**Melting Point:**

680C (1256F)

**Vapor Density (Air=1):**

No information found.

**Vapor Pressure (mm Hg):**

1 @ 745C (1373F)

**Evaporation Rate (BuAc=1):**

No information found.

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## 10. Stability and Reactivity

**Stability:**

Stable under ordinary conditions of use and storage. On long exposure to air becomes yellow due to release of iodine.

**Hazardous Decomposition Products:**

Oxides of the contained metal and halogen, possibly also free, or ionic halogen.

**Hazardous Polymerization:**

Will not occur.

**Incompatibilities:**

Diazonium salts; diisopropyl peroxydicarbonate; oxidants; bromine and chlorine trifluorides; fluorine perchlorate; calomel (mercurous chloride); potassium chlorate; metallic salts; tartaric and other acids.

**Conditions to Avoid:**

Air, moisture, light and incompatibles.

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## 11. Toxicological Information

Investigated as a mutagen, reproductive effector.

-----\Cancer Lists\-----			
Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
-----	-----	-----	-----

Potassium Iodide (7681-11-0)

No

No

None

## 12. Ecological Information

### Environmental Fate:

No information found.

### Environmental Toxicity:

No information found.

## 13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal 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

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-- DSL		Phil.
Potassium Iodide (7681-11-0)	Yes	Yes	No	Yes
-----\Federal, State & International Regulations - Part 1\-----				
Ingredient	-SARA 302- RQ	TPQ	-SARA 313- List	Chemical Catg.
Potassium Iodide (7681-11-0)	No	No	No	No
-----\Federal, State & International Regulations - Part 2\-----				
Ingredient	CERCLA	-RCRA- 261.33	-TSCA- 8(d)	
Potassium Iodide (7681-11-0)	No	No	No	

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

**Australian Hazchem Code:** No information found.

**Poison Schedule:** No information found.

**WHMIS:**

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

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## 16. Other Information

**NFPA Ratings: Health: 1 Flammability: 0 Reactivity: 0**

**Label Hazard Warning:**

CAUTION! MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT.

**Label Precautions:**

Avoid contact with eyes, skin and clothing. Avoid breathing dust. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling.

**Label First Aid:**

In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists. If inhaled, remove to fresh air. Get medical attention for any breathing difficulty.

**Product Use:**

Laboratory Reagent.

**Revision Information:**

Pure. New 16 section MSDS format, all sections have been revised.

**Disclaimer:**

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**Prepared by:** Strategic Services Division

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