

# Material Safety Data Sheet

## Potassium iodide

ACC# 19435

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Potassium iodide

**Catalog Numbers:** AC193790000, AC193790100, AC193790500, AC196730000, AC196730025, AC196735000, AC206470000, AC206471000, AC206475000, AC373650000, AC373651000, AC373655000, AC418260000, AC418261000, 41826-5000, BP367-500, NC9433542, P410-10, P410-100, P410-3, P410-500, P410J-500, P412-10, P412-3, P412-500

**Synonyms:** None.**Company Identification:**

Fisher Scientific  
1 Reagent Lane  
Fair Lawn, NJ 07410

**For information, call:** 201-796-7100**Emergency Number:** 201-796-7100**For CHEMTREC assistance, call:** 800-424-9300**For International CHEMTREC assistance, call:** 703-527-3887

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
7681-11-0	Potassium iodide	99.995	231-659-4

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: white crystalline powder.

**Caution!** May cause eye, skin, and respiratory tract irritation. May cause reproductive and fetal effects.**Target Organs:** Thyroid.**Potential Health Effects****Eye:** Causes mild eye irritation.**Skin:** May cause skin irritation. May be harmful if absorbed through the skin. May cause allergic sensitization in certain individuals.**Ingestion:** May cause irritation of the digestive tract. May be harmful if swallowed.**Inhalation:** May cause respiratory tract irritation. May be harmful if inhaled. May cause respiratory sensitization.**Chronic:** May cause reproductive and fetal effects. May interfere with iodine uptake of the thyroid gland and enlarge it. Some references (e.g. Dreisbach's Handbook) say that iodine and iodine compounds are

potent sensitizers and that repeated contact may cause sensitivity dermatitis, laryngeal edema, serum sickness with lymph node enlargement, and joint pain and swelling.

## Section 4 - First Aid Measures

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin:** Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

**Ingestion:** Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

**Notes to Physician:** Treat symptomatically and supportively.

## Section 5 - Fire Fighting Measures

**General Information:** Wear appropriate protective clothing to prevent contact with skin and eyes. Wear a self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products.

**Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or chemical foam.

**Flash Point:** Not applicable.

**Autoignition Temperature:** Not applicable.

**Explosion Limits, Lower:** Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 1; Flammability: 0; Instability: 0

## Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions.

## Section 7 - Handling and Storage

**Handling:** Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

**Storage:** Store in a cool, dry place. Do not store in direct sunlight. Store in a tightly closed container.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

#### Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Potassium iodide	none listed	none listed	none listed

**OSHA Vacated PELs:** Potassium iodide: No OSHA Vacated PELs are listed for this chemical.

#### Personal Protective Equipment

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to minimize contact with skin.

**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

## Section 9 - Physical and Chemical Properties

**Physical State:** Crystalline powder

**Appearance:** white

**Odor:** odorless

**pH:** 7-9 (aq soln)

**Vapor Pressure:** Not available.

**Vapor Density:** Not available.

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** 1330 deg C @ 760 mmHg

**Freezing/Melting Point:** 680 deg C

**Decomposition Temperature:** Not available.

**Solubility:** Soluble.

**Specific Gravity/Density:** 3.13

**Molecular Formula:** KI

**Molecular Weight:** 166

## Section 10 - Stability and Reactivity

**Chemical Stability:** Air sensitive. Moisture sensitive. Light sensitive.

**Conditions to Avoid:** Incompatible materials, light, dust generation, moisture, prolonged exposure to air.

**Incompatibilities with Other Materials:** Chloral hydrate, calomel, strong reducing agents, oxidizing agents, alkali metals, metals, metal salts, ozone, perchloryl fluoride, charcoal, bromine trifluoride, chlorine trifluoride.

**Hazardous Decomposition Products:** Hydrogen iodide, oxides of potassium.

**Hazardous Polymerization:** Has not been reported.

## Section 11 - Toxicological Information

**RTECS#:**

CAS# 7681-11-0: TT2975000

**LD50/LC50:**

Not available.

**Carcinogenicity:**

CAS# 7681-11-0: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** Potassium iodide has been shown to produce fetotoxicity in newborns.**Teratogenicity:** Teratogenic effects have occurred in humans.**Reproductive Effects:** Adverse reproductive effects have occurred in humans.**Mutagenicity:** Mutagenic effects have occurred in experimental animals.**Neurotoxicity:** No information found**Other Studies:**

Section 12 - Ecological Information
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**Ecotoxicity:** No data available. No information available.**Environmental:** No information available.**Physical:** No information available.**Other:** Do not empty into drains.

Section 13 - Disposal Considerations
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Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.**RCRA U-Series:** None listed.

Section 14 - Transport Information
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	US DOT	Canada TDG
<b>Shipping Name:</b>	Not regulated.	Not regulated.
<b>Hazard Class:</b>		
<b>UN Number:</b>		
<b>Packing Group:</b>		

Section 15 - Regulatory Information
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**US FEDERAL**

**TSCA**

CAS# 7681-11-0 is listed on the TSCA inventory.

**Health & Safety Reporting List**

None of the chemicals are on the Health & Safety Reporting List.

**Chemical Test Rules**

None of the chemicals in this product are under a Chemical Test Rule.

**Section 12b**

None of the chemicals are listed under TSCA Section 12b.

**TSCA Significant New Use Rule**

None of the chemicals in this material have a SNUR under TSCA.

**CERCLA Hazardous Substances and corresponding RQs**

None of the chemicals in this material have an RQ.

**SARA Section 302 Extremely Hazardous Substances**

None of the chemicals in this product have a TPQ.

**SARA Codes**

CAS # 7681-11-0: immediate, delayed.

**Section 313** No chemicals are reportable under Section 313.**Clean Air Act:**

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

**Clean Water Act:**

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**OSHA:**

None of the chemicals in this product are considered highly hazardous by OSHA.

**STATE**

CAS# 7681-11-0 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

**California Prop 65**

California No Significant Risk Level: None of the chemicals in this product are listed.

**European/International Regulations****European Labeling in Accordance with EC Directives****Hazard Symbols:**

Not available.

**Risk Phrases:****Safety Phrases:**

S 24/25 Avoid contact with skin and eyes.

**WGK (Water Danger/Protection)**

CAS# 7681-11-0: 1

**Canada - DSL/NDSL**

CAS# 7681-11-0 is listed on Canada's DSL List.

**Canada - WHMIS**

This product has a WHMIS classification of D2A.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

**Canadian Ingredient Disclosure List**

CAS# 7681-11-0 is listed on the Canadian Ingredient Disclosure List.

## Section 16 - Additional Information

**MSDS Creation Date:** 2/25/1999

**Revision #8 Date:** 2/15/2008

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.*