



# **Material Safety Data Sheet**

NFPA	HMIS	Personal Protective Equipment
100	Health Hazard  Fire Hazard  0	
	Reactivity	See Section 15.

Section 1. Chemical Product and Company Identification			Page Number: 1
Common Name/ Trade Name	Potassium lodide	Catalog Number(s).	P1335, P1340, P1342, P1344, PO185
		CAS#	7681-11-0
Manufacturer	SPECTRUM LABORATORY PRODUCTS INC.	RTECS	TT2975000
	14422 S. SAN PEDRO STREET GARDENA, CA 90248	TSCA	TSCA 8(b) inventory: Potassium lodide
Commercial Name(s)	Not available.	CI#	Not available.
Synonym	Not available.		
Chemical Name	Potassium Iodide	IN CASE OF EMERGENCY CHEMTREC (24hr) 800-424-9300	
Chemical Family	Not available.	CALL (310) 516-8000	
Chemical Formula	KI		
Supplier	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248		

Section 2.Composition and Information on Ingredients					
			Exposure Limits		
Name	CAS#	TWA (mg/m³)	STEL (mg/m³)	CEIL (mg/m³)	% by Weight
1) Potassium Iodide	7681-11-0				100
Towice legical Data Potassium Indida		ı	i		

Toxicological Data
on Ingredients

Potassium lodide
LD50: Not available.
LC50: Not available.

Lowest Published Lethal Dose:

LDL [Mouse] - Route: Oral; Dose: 1862 mg/kg LDL [Rabbit] - Route: Oral; Dose: 916 mg/kg

#### Section 3. Hazards Identification

Potential Acute Health Effects Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

Potential Chronic Health Effects **CARCINOGENIC EFFECTS**: Not available.

MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells.

TERATOGENIC EFFECTS: Not available.

**DEVELOPMENTAL TOXICITY**: Classified Reproductive system/toxin/female, Development toxin [POSSIBLE].

The substance may be toxic to thyroid.

Repeated or prolonged exposure to the substance can produce target organs damage.

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Potassium lodide	Page Number: 2
Section 4. First Aid Measures	

Section 4. First A	id 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.	
<b>Serious Ingestion</b>	Not available.	

Section 5. Fire and E.	Section 5. Fire and Explosion Data		
Flammability of the Product	Non-flammable.		
<b>Auto-Ignition Temperature</b>	Not applicable.		
Flash Points	Not applicable.		
Flammable Limits	Not applicable.		
<b>Products of Combustion</b>	Some hazardous decomposition products are: Hydrogen lodide, Oxides of potassium, iodine		
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.		

Section 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.	

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Section 7. Har	Section 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 SensitiveKeep container tightly closed in light-resistant containers. Keep container in a cool, well-ventilated area.	

Section 8. Exposure	Controls/Personal Protection	
<b>Engineering Controls</b>	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.	
<b>Exposure Limits</b>	Not available.	

Section 9. Physical a	nd Chemical Properties		
Physical state and appearance	Solid. (Deliquescent crystals solid.)	Odor	Odorless.
Molecular Weight	166 g/mole	Taste	Bitter. Saline. (Strong.)
pH (1% soln/water)	Not available.	Color	White.
<b>Boiling Point</b>	1330°C (2426°F)		
Melting Point	681°C (1257.8°F)		
Critical Temperature	Not available.		
Specific Gravity	3.1 (Water = 1)		
Vapor Pressure	Not applicable.		
Vapor Density	Not available.		
Volatility	Not available.		
Odor Threshold	Not available.		
Water/Oil Dist. Coeff.	Not available.		
Ionicity (in Water)	Not available.		
<b>Dispersion Properties</b>	See solubility in water, methanol, acetone.		
Solubility	Easily soluble in cold water, hot water. Soluble in methanol. Partially soluble in acetone.		

Section 10. Stability and Reactivity Data		
Stability	The product is stable.	
<b>Instability Temperature</b>	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.	

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Potassium lodide	Page Number: 4
Corrosivity	Corrosive in presence of steel, of aluminum, 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, aluminum 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.

Section 11. Toxicological Information			
<b>Routes of Entry</b>	Inhalation. Ingestion.		
<b>Toxicity to Animals</b>	LD50: Not available. LC50: Not available.		
<b>Chronic Effects on Humans</b>	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 efects 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 edema and inflammation of the tonsils. Ingestion: Causes gastrointestinal tract irritation with nausea, vomiting and diarrhea. May affect behavior (somnolence, muscle weakness), respiration (dyspnea). 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, stomatits, parotitis, anemia, and skin rashes. Chronic ingestion may also affect metabolism (anorexia), and thyroid gland (hypothyroidism, goiter). Furthermore, chronic ingestion of iodides (in animals) during pregnancy has resulted in fetal deaths, severe goiter and cretinoid appearance of the newborn.		

Section 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.		

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## Section 13. Disposal Considerations

Waste Disposal

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

Section 14. Transport Information		
DOT Classification	Not a DOT controlled material (United States).	
Identification	Not applicable.	
Special Provisions for Transport	Not applicable.	
DOT (Pictograms)		

#### Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations TSCA 8(b) inventory: Potassium Iodide

California
Proposition 65
Warnings

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found.

California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.

Other Regulations

EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

**Other Classifications** 

WHMIS (Canada) CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

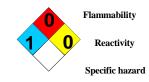
DSCL (EEC) Not available Not applicable.

HMIS (U.S.A.)



**National Fire Protection Association (U.S.A.)** 

Health



WHMIS (Canada) (Pictograms)



DSCL (Europe) (Pictograms)



TDG (Canada) (Pictograms)



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ADR (Europe) (Pictograms)



### **Protective Equipment**



Gloves.



Lab coat.



Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Safety glasses.



Section 16. Other Information

MSDS Code P4390

References Not available.

Other Special Considerations

Validated by Sonia Owen on 1/18/2005.

Verified by Sonia Owen. Printed 1/24/2005.

#### CALL (310) 516-8000

#### **Notice to Reader**

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.