

# **Safety Data Sheet**

# Potassium Iodide

#### 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Potassium Iodide

Synonyms/Generic Names: Potide; Potassium salt, Iodic acid

**SDS Number:** 575.00

Product Use: For Educational Use Only

Manufacturer: Columbus Chemical Industries, Inc.

N4335 Temkin Rd. Columbus, WI. 53925

For More Information Contact: Ward's Science

5100 West Henrietta Rd. PO Box 92912-9012 Rochester, NY 14692

(800) 962-2660 (Monday-Friday 7:30-7:00 Eastern Time)

In Case of Emergency Call: CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

### 2. HAZARDS IDENTIFICATION

**OSHA Hazards:** Target organ effect, Harmful by ingestion, Irritant, Teratogen

Target Organs: Thyroid
Signal Words: Warning

**Pictograms:** 



#### **GHS Classification:**

Acute toxicity, Oral	Category 4
Skin irritation	Category 2
Eye irritation	Category 2A

### GHS Label Elements, including precautionary statements:

#### **Hazard Statements:**

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

### **Precautionary Statements:**

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

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### **Potential Health Effects**

Eyes	Causes eye irritation.
Inhalation	May be harmful if inhaled. Causes respiratory tract irritation.
Skin	Harmful if absorbed through skin. Causes skin irritation.
Ingestion	Harmful if swallowed.

#### **NFPA Ratings**

Health	1
Flammability	0
Reactivity	0
Specific hazard	Not Available

### **HMIS Ratings**

Health	1
Fire	0
Reactivity	0
Personal	Е

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS#	EINECS# / ELINCS#	Formula	Molecular Weight
Potassium lodide	>95	7681-11-0	231-659-4	KI	166.01 g/mol

# 4. FIRST-AID INFORMATION

Eyes	In case of eye contact, rinse with plenty of water and seek medical attention.	
Inhalation	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not	
	breathing, give artificial respiration. Get medical attention.	
Skin	Immediately flush with plenty of water for at least 15 minutes while removing contaminated	
	clothing and wash using soap. Get medical attention.	
Ingestion	Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If	
	conscious, wash out mouth with water. Get medical attention.	

### **5. FIREFIGHTING MEASURES**

Suitable (and unsuitable)	Product is not flammable. Use appropriate media for adjacent fire. Cool	
extinguishing media	containers with water.	
Special protective equipment	Wear self-contained, approved breathing apparatus and full protective	
and precautions for firefighters	clothing, including eye protection and boots.	
Specific hazards arising from	May produce toxic fumes (potassium oxides, hydrogen iodide) under	
the chemical	fire conditions. (See also Stability and Reactivity section)	

# **6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures	See section 8 for recommendations on the use of personal protective equipment. Avoid dust formation.
Environmental precautions	Prevent spillage from entering drains. Any release to the environment
	may be subject to a federal/national or local reporting requirements.
Methods and materials for	Pick up and arrange disposal without creating dust. Sweep up and
containment and cleaning up	shovel. Clean surfaces thoroughly with water to remove residual
	contamination. Dispose of all waste and cleanup materials in accordance
	with regulations.

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#### 7. HANDLING AND STORAGE

#### Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of dusts.

### Conditions for safe storage, including any incompatibilities

Store in cool, dry well ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities). Air, light, and moisture sensitive. Store under inert gas.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls: Contains no substances with occupational exposure limit values.

#### **Personal Protection**

Eyes	Wear chemical safety glasses with side shields or goggles.	
Inhalation	Provide local exhaust, preferably mechanical. If necessary use an approved respirator.	
Skin	Wear appropriate chemical-resistant gloves, lab coat or apron.	
Other	Not Available	

#### Other Recommendations

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling. Have supplies and equipment for neutralization and running water available.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	White crystalline solid
Odor	Odorless
Odor threshold	Not Available
pH	6-9 at 166 g/l at 25°C (77°F)
Melting point/freezing point	681°C (1258°F)
Initial boiling point and boiling range	1330°C (2426°F)
Flash point	Not Flammable
Evaporation rate	Not Available
Flammability (solid, gas)	Not Flammable
Upper/lower flammability or explosive limit	Not Explosive
Vapor pressure	Not Available
Vapor density	Not Available
Relative density	Not Available
Solubility (ies)	125 g/100 mL @ 0°C (32°F); 208 g/100 mL @ 100° (212°F)
Partition coefficient: n-octanol/water	Not Available
Auto-ignition temperature	Not Available
Decomposition temperature	Not Available

### 10. STABILITY AND REACTIVITY

Chemical Stability	Stable	
Possibility of Hazardous Reactions	Will not occur.	
Conditions to Avoid	Moisture, heat.	
Incompatible Materials	Strong reducing agents, nickel, strong acids, steel, aluminum,	
	alkali metals, brass, magnesium, zinc, cadmium, copper, tin.	
<b>Hazardous Decomposition Products</b>	Hydrogen iodide, potassium oxide	

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# 11. TOXICOLOGICAL INFORMATION

### **Acute Toxicity**

Skin	Skin – rabbit – Irritating to skin.
Eyes	Eyes – rabbit – Irritating to eyes – 24 hours – Draize test
Respiratory	Not Available
Ingestion	LD50 Oral – mouse – 1,000 mg/kg

#### Carcinogenicity

<b>-</b>	
IARC	No components of this product present at levels greater than or equal to 0.1% is identified
	as probable, possible or confirmed human carcinogen by IARC.
ACGIH	No components of this product present at levels greater than or equal to 0.1% is identified
	as a carcinogen or potential carcinogen by ACGIH.
NTP	No components of this product present at levels greater than or equal to 0.1% is identified
	as a known or anticipated carcinogen by NTP.
OSHA	No components of this product present at levels greater than or equal to 0.1% is identified
	as a carcinogen or potential carcinogen by OSHA.

# Signs & Symptoms of Exposure

Skin	Redness, swelling, pain, itchiness, rash	
Eyes	Redness, pain, tearing, conjunctivitis	
Respiratory	Coughing, wheezing, laryngitis, shortness of breath	
Ingestion	Gastrointestinal pain, burning sensation, headache, nausea and vomiting	

Chronic Toxicity	Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.	
Teratogenicity	Exposure to excessive amounts of iodine during pregnancy is capable of producing fetal hypothyroidism. Iodine-containing drugs have been associated with fetal gloiter.	
Mutagenicity	Mutagenic for mammalian somatic cells	
Embryotoxicity	Not Available	
Specific Target Organ Toxicity	Not Available	

# 12. ECOLOGICAL INFORMATION

# **Ecotoxicity**

Aquatic Vertebrate	LC50 – Oncorhynchus mykiss (Rainbow trout)- 2,190 mg/l- 96 h
Aquatic Invertebrate	EC50 – Daphnia magna (Water flea) – 2.7 mg/l – 24 hours
Terrestrial	Not Available

Persistence and Degradability	Not Available
Bioaccumulative Potential	Not Available
Mobility in Soil	Not Available
PBT and vPvB Assessment	Not Available
Other Adverse Effects	Not Available

# 13. DISPOSAL CONSIDERATIONS

Waste Residues	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste products or residues.
Product	Users should review their operations in terms of the applicable federal/national or
Containers	local regulations and consult with appropriate regulatory agencies if necessary
	before disposing of waste product container.

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The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

#### 14. TRANSPORTATION INFORMATION

US DOT	Not Dangerous Goods
TDG	Not Dangerous Goods
IMDG	Not Dangerous Goods
Marine Pollutant	No
IATA/ICAO	Not Dangerous Goods

# 15. REGULATORY INFORMATION

TSCA Inventory Status	All ingredients are listed on the TSCA inventory.
DSCL (EEC)	All ingredients are listed on the DSCL inventory.
California Proposition 65	Not Listed
SARA 302	Not Listed
SARA 304	Not Listed
SARA 311	Potassium Iodide
SARA 312	Potassium Iodide
SARA 313	Not Listed
WHMIS Canada	Class D-2A- Material causing other toxic effects (Very toxic)

### **16. OTHER INFORMATION**

Revision	Date
Revision 1	02/04/2013

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