

MSDS**Material Safety Data Sheet**

24 HOUR EMERGENCY
TELEPHONE NUMBER
CALL CHEMTREC
1-800-424-9300

189 Twin County Road • Morgantown, PA 19543 • (610) 524-5810

LUGOL'S IODINE CONCENTRATE

Product Identification

Product Name: Lugol's Iodine Concentrate
Product Code: ES815, ES862
Product Description: Aqueous solution of iodine and potassium iodide in water.

Health	2
Flammability	0
Reactivity	1
Physical Hazard	None

Section 1 - Shipping Data

DOT Shipping Name:* Not applicable
DOT Hazard Class: Not applicable
DOT Identification: Unregulated
Tel. # for information: (610) 524-5810
Emergency Tel. #: (800) 424-9300
Prepared by: P.B.

Section 2 - Hazardous Ingredients / Identity Information

CHEMICAL COMPONENTS	CAS#	%	OSHA PEL	ACGIH TLV
iodine	7553-56-2	5.0% ^{w/v}	1.0 mg/m ³ TWA ceiling	1.0 mg/m ³ TWA ceiling
potassium iodide	7681-11-0	10.0% ^{w/v}	-----	-----

Section 3 - Physical / Chemical Characteristics

Boiling Point:	101° C	Specific Gravity (H₂O = 1):	1.1
Vapor Pressure (mm Hg and Temperature):	18 @ 20° C	Evaporation Rate (<i>n-butyl alcohol</i>= 1):	1
Vapor Density (AIR=1):	0.6	Solubility in Water:	100%
Appearance and Odor: An opaque purple solution with the characteristic odor of iodine.			

Section 4 - Fire and Explosion Hazard Data

Flash Point (Method Used): Not applicable **Flammability Limits:** Not applicable
Extinguishing Media: Not applicable
Special Fire Fighting Procedures: Not applicable
Unusual Fire and Explosive Hazards: Pyrolysis will release corrosive iodine vapor.

Section 5 - Reactivity Data

Stability: Stable **Conditions to Avoid:** Heat
Incompatibility (Materials to Avoid): Nothing unusual.
Precautions to be taken in Handling and Storage: Store at room temperature.

Section 6 - Health Hazard Data

Routes of Entry	Inhalation?	Skin Absorption?	Ingestion?
	yes	yes	yes
Carcinogenicity?	NTP?	IARC Monographs?	OSHA Regulated?
no	no	no	no

Health Hazards (Acute and Chronic): Large doses of iodine cause severe vomiting, diarrhea, abdominal pain, thirst, shock, fever, delirium, stupor and death. Prolonged exposure to iodine compounds may produce iodism and deficiency of thyroid hormone.

Signs and Symptoms of Exposure: May cause contact dermatitis. Repeated exposure to iodine compounds may cause rash, swelling of the vocal cords, severe generalized allergic reaction, joint pain and swelling. Iodine is absorbed through intact skin.

Medical Conditions Generally Aggravated by Exposure: Individuals with thyroid, lung or kidney disease may wish to consult a physician before working with iodine compounds.

Emergency and First Aid Procedures:

Seek medical assistance for further treatment, observation and support if necessary.

Eye Contact: Flush with water at least 15 minutes and get medical attention if irritation persists.

Skin contact: Remove contaminated clothing and flush with water. Get medical attention if irritation persists.

Ingestion: Do not induce vomiting if patient is unconscious or extremely drowsy. Otherwise administer 2 glasses of water and induce vomiting. Get immediate medical attention even if symptoms improve.

Section 7 - Precautions For Safe Handling and Use

Steps to be Taken In Case of Spill Or Release: Absorb with a suitable absorbent (such as a paper towel) and dispose.

Waste Disposal Methods: Usually not restricted, but local ordinances vary. Iodine may often be neutralized with thiosulfate and flushed down drain with excess water. Insure compliance with all government regulations.

Section 8- Control Measures

Respiratory Protection (Specify Type): Not required.

Ventilation: General ventilation is usually sufficient.

Protective Gloves: Not required.

Eye Protection: Not required but laboratory safety goggles or similar products are recommended as part of good laboratory practice.

Other Protective Clothing And Equipment: Not required.

Hygienic Work Practices: Wash well after handling, especially before eating and smoking.

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