

## **SAFETY DATA SHEET**

#### 1 - PRODUCT AND COMPANY IDENTIFICATION

Product Name: LUGOL IODINE

Product Code: I-2020Z

Product use: For laboratory or industrial use only

Supplier: Cochimbec Inc.

8561 chemin Dalton

Town of Mount-Royal, Quebec

H4T 1V5 CANADA

Telephone: 514-990-1935

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#### 2 - HAZARDS IDENTIFICATION

GHS Classification: Acute oral toxicity (Category 4)

Acute Inhalation toxicity (Category 4)

Skin Irritation (Category 2)

Serious eye damage / Eye irritation (Category 2)

Specific target organ toxicity – single exposure (Category 3) Specific target organ toxicity – repeated exposure (Category 1)



Signal word:		Danger
Hazard statement:	H302	Harmful if swallowed.
	H312	Harmful in contact with skin.
	H319	Causes serious eye irritation.
	H333	May be harmful if inhaled.
	H335	May cause respiratory irritation.
	H372	Causes damage to organs (liver, kidney) through prolonged or repeated exposure.
	H402	Harmful to aquatic life.
Precautionary statement:	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	P264	Wash skin thoroughly after handling.
	P261	Avoid breathing vapours.

	P271	Use only outdoors or in a well-ventilated area.
	P273	Avoid release to the environment.
	P314	Get medical advise/attention if you feel unwell.
Other hazards:	Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	Eyes:	May causes eye irritation.
Skin: Causes irritation		Causes irritation on open wound.
	Ingestion:	May be harmful if swallowed.

#### 3 - COMPOSION / INFORMATION ON INGREDIENTS

**Synonyms:** Iodine solution, Weigert solution.

Other ingredients are either not dangerous or below the required reporting levels.

INGREDIENT	Concentration	CAS No.	EC No.	Index No.
Potassium Iodide	2 %	7681-110	231-659-4	-
Iodine	1 %	7553-56-2	231-442-4	053-001-00-3

#### **4 - FIRST AID MEASURES**

Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.
Skin contact:	Wash with plenty of soap and water. Consult a physician if irritation persists.
Eye contact:	Rinse immediately and cautiously with plenty of water. Rinse also under the eyelids. Remove contact lenses if present and easy to do, continue rinsing. If eye irritation persists get medical advice/attention.
Ingestion:	Call a POISON CENTER or doctor if you feel unwell. Rinse mouth.
Most important symptoms / effects	The most important symptoms/effects are presented in Section 2 and/or 11.

#### **5 - FIRE-FIGHTING MEASURES**

Extinguishing media:	Use agent most appropriate to extinguish surrounding fire.
Combustion Exposure Hazards:	No data.
Fire-Fighting equipment and precaution:	Wear normal firefighting gear suitable for surrounding fire. Self-contained respiratory protection may be required.
Sensitivity to mechanical impact:	Not sensitive.
Sensitivity to static discharge:	Not sensitive.

NFPA Risk		HEALTH	FLAMMABILITY	REACTIVITY	HAZARDS
NFFA	RISK	•	0	0	
0=Low	4=High	2	U	U	

#### **6 - ACCIDENTAL RELEASE MEASURES**

Personal Precautions:	Use personal protective equipment. Avoid contact with skin and eyes.
Environmental Precautions:	Prevent further leakage or spillage using personal protection. Avoid product entering into drains.
Method & Material for containment and cleaning up:	Contain spillage. Prevent further leakage if possible and safe to do so. Keep in suitable closed container for disposal.

#### 7 - HANDLING AND STORAGE

Precautions for safe handling:	Wear personal protective equipment. Do not breathe vapours / spray.
Conditions for Safe Storage:	Keep container tightly closed in a well-ventilated area.

#### 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

#### COMPONENTS WITH WORKPLACE CONTROL PARAMETERS

This product does not contain any dangerous substance that has occupational exposure limits as established by those responsible to set the rules specific to the region.

COMPONENT	CAS-No	VALUE	CONTROL PARAMETERS	BASIS
IODINE	7553-56-2	TWA	0.01 ppm	USA. ACGIH Threshold Limits Values (TLV)
		STEL	0.1 ppm	USA. OSHA – PEL
		STEL	0.1 ppm	NIOSH - IDLH





Eye Protection:	Safety glasses or chemical safety goggles.
Hand Protection:	Use chemical resistant gloves.
Body Protection:	None normally required.
Respiratory	None required in properly vented areas.
Protection:	
Engineering	Ensure adequate ventilation.
Controls:	

#### 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid.	Auto ignition temperature:	N/A
Color:	Brown	Upper Explosion Limit:	N/A

Odour:	Faint Iodine	Lower Explosion Limit:	N/A
Odour threshold::	N/D	Vapour pressure:	N/A
pH:	N/D	Vapour density: (air = 1)	N/ D
Melting point:	~ -1°C	Relative density	1.02
Boiling point:	~ 100°C @ 760 mm Hg	Water solubility:	Completely soluble
Boiling range:	100-101°C @ 760 mm Hg	Decomposition temperature:	N/D
Density	1.02 g/mL @ 25°C	Refractive Index:	N/D
Flash point:	N/A	Viscosity:	N/D
Evaporation rate: (Water = 1)	>1	Partition coeficient: n-octanol / water	N/D

### **10 - STABILITY AND REACTIVITY**

Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	No dangerous reaction known under conditions of normal use.
Conditions to avoid:	No data
Incompatible materials:	Metals, unsaturated organic compounds, alkaline solutions.
Hazardous decomposition products:	Hazardous decomposition products formed under fire conditions: lodine fumes may be released.

## 11 - TOXICOLOGICAL INFORMATION

COMPONENTS	LD <sub>50</sub> ORAL	LD <sub>50</sub> DERMAL	LC <sub>50</sub> INHALATION
IODINE	14,000 mg/kg (rat)	2,000 mg/kg (rabbit)	4.588 mg/L 4 h (Rat)
POTASSIUM IODIDE	1,000 mg/kg (rat)		
Skin Corrosion / irritation	Skin irritation		
Serious eye damage / eye irritation	Eye irritant		
Respiratory or skin sensitisation	No data available.		
Germ cell Mutagenicity	No data available.		
Carcinogenicity	This product <b>does not</b> contain any compounds listed by NTP, IARC or EPA classified as a carcinogen.		
Reproductive toxicity	No data available.		
Teratogenicity	No data available.		
Aspiration hazard	No data available.		
Symptoms of Exposure	Prolonged or repeated exposure may produce iodism in sensitive individuals. Symptoms of exposure include: skin rash, running nose, headache and irritation of the mucous membrane. To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.		
Synergistic effects	No data available		
Addition information	RTECS: Not available		

#### **12 - ECOLOGICAL INFORMATION**

COMPONENTS	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates	Toxicity to Algea
IODINE	Very toxic to aquatic life	No data available.	No data available.
Persistence and degradability	No data available.		
Bioaccumulative potential	No data available.		
Mobility in soil	No data available.		
PBT and vPvB assessment	No data available.		
Other adverse effects	No data available.		

## **13 - DISPOSAL CONSIDERATIONS**

Product	Contact a licensed professional waste disposal service to dispose of this material. Federal and local laws governing disposal of material can differ. Ensure proper disposal compliance with authorities before disposal.
Contaminated clothing	Wash before reusing clothes.
Contaminated packaging	Dispose of packaging in a safe manner to comply with local, state and federal regulations.

#### **14 - TRANSPORT INFORMATION**

	TDG	IMDG	IATA
Shipping Name:	Not regulated	Not regulated	Not regulated

#### 15 - REGULATORY INFORMATION

<b>US Regulations</b>	No data available.
Canada Classification	SDS in compliance with provisions of information as set out in Canadian Standard – Part 4, Schedule 1 and 2 of the Hazardous Products Regulations (HPR) and meets the requirements of the HPR (Paragraph 13(1)9a) of the Hazardous Product Act (HPA)).
International	No data available.

#### **16 - OTHER INFORMATION**

Information on the	Prepared by Cochimbec Inc. Safety Personnel
preparation of SDS:	October 15, 2021

	Revision 0
	I.C. 1,2,18,43
Abbreviations:	ACGIH = American Conference of Governmental Industrial Hygienists
	ASTM = American Society for Testing and Materials
	BCF = Bioconcentration Factor
	CAS = Chemical Abstract Services
	CCOHS = Canadian Center for Occupational Health & Safety
	CEN (EU) = Committée Européen de Normalisation
	CERCLA = Comprehensive Environmental Response Compensation & Liability Act
	CFR = Code of Federal Regulations
	CMR = Carcinogenic-mutagenic-toxic for reproduction
	CPR = Controlled Products Regulations
	DIN = German Institute for Standardisation
	DOT = Department of Transport
	EC <sub>50</sub> = Half maximal effect concentration
	EINECS = European Inventory of Existing Commercial Chemical Substances
	GHS = Global Harmonization System
	GLP = Good Laboratory practice
	GMO = Genetic Modified Organism
	IARC = International Agency for research on Cancer
	IATA = International Air Transport Association
	ISO = International Organisation for Standardisation
	IDLH = Immediate danger to life and health
	IMDG = International Maritime Dangerous Goods
	LC <sub>50</sub> = Lethal concentration causing 50% death
	LD <sub>50</sub> = Lethal dose causing 50% death
	LOAEL = Lowest Observed Adverse Effect Level
	LOEL = Lowest Observed Effect Level
	N/A = Not Applicable
	N/D = No Data
	N/E = Not Established
	NFPA = National Fire Protection Association
	NIOSH = National Institute for Occupational Safety & Health
	NTP = National Toxicology Program
	OECD = Organisation for Economic Co-operation & Development
	OEL = Occupational exposure limit
	OHSC = Occupational health & safety council (committee)
	OSHA = Occupational Safety & Health Administration
	PBT = Persistent, Bioaccumulation, Toxic
	PEL = Permissible Exposure Limit
	RCRA = Resource Conservation & Recovery Act
	RTECS = Registry of Toxic Effects of Chemical Substances
	SARA = Species at Risk Act
	STEL = Short term exposure limit
	STEV = Short term exposure value
	STOT = Specific Target Organ Toxicity
	TDG = Transport of Dangerous Goods
	TLV = Threshold limit value

	TMD = Transport de Matières Dangereuses
	TSCA = Toxic Substance Control Act
	TWA = Time weighted Average
	TWAEV = Time weighted average exposure value
	UN = United Nations
	vPvB = very Persistent and very Bioaccumulative
	VOC = Volatile Organic Compounds
	WEEL = Workplace Environment Exposure Limit
	WHO = World Health Organisation
	WHMIS = Workplace Hazardous Material Information System
	W/V = Weight / Volume
	W/W = Weight / Weight
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# **End of Safety Data Sheet**