MATERIAL SAFETY DATA SHEET

LUGOL'S IODINE

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Lugol's Iodine

SYNONYMS:

CATALOG CODES: VIG

MANUFACTURER: Volu-Sol Incorporated

DIVISION: Business Services
ADDRESS: 5095 West 2100 South
Salt Lake City, UT 84120
EMERGENCY PHONE: (800) 535-5053

CHEMTREC PHONE: (800) 424-9300
OTHER CALLS: (801) 974-9474
FAX PHONE: (801) 974-9553
CHEMICAL FAMILY: N/A
CHEMICAL FORMULA: Mixture
PRODUCT USE: Laboratory Reagent

PREPARED BY: ASH

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT	CAS NO.
Iodine	7553-56-2
Potassium Iodide	7681-11-0
Deionized Water	7732-18-5

SARA 313 REPORTABLE

None

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

May cause allergic skin reaction. May cause severe skin irritation. May be absorbed through intact skin. May cause respiratory and digestive tract irritation. May cause eye irritation. May cause adverse reproductive effects based upon animal studies.

CARCINOGENICITY: Not Listed OSHA: ACGIH: NTP: IARC:

SECTION 4: FIRST AID MEASURES

Eyes:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.

Skin:

Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion:

Get medical aid. Wash mouth out with 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.

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR (% BY VOLUME); UPPER: NA LOWER: NA

FLASH POINT: NA

AUTOIGNITION TEMPERATURE: NA

EXTINGUISHING MEDIA: Dry chemical, alcohol foam or carbon dioxide. Water may be ineffective. Water spray may be used to keep fire exposed containers cool, dilute spills to nonflammable mixtures, protect personnel attempting to stop leak and disperse vapors.

SPECIAL FIRE FIGHTING PROCEDURES: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Above flash point, vaporair mixtures are explosive within flammable limits noted above. Vapors can flow along surfaces to distant ignition source and flash back. Contact with strong oxidizers may cause fire. Sealed containers may rupture when heated. This material may produce a floating fire hazard. Sensitive to static discharge. Ethanol burns with a near invisible flame in direct light.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer! If a leak or spill has not ignited, use water spray to disperse the vapors, to protect personnel attempting to stop leak, and to flush spills away from exposures. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Protect against physical damage. Store in a cool, dry well-ventilated location, away from any area where the fire hazard may be acute. Outside or detached storage is preferred. Separate from incompatibles. Containers should be bonded and grounded for transfers to avoid static sparks. Storage and use areas should be No Smoking areas. Use non-sparking type tools and equipment, including explosion proof ventilation. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

AIRBORNE EXPOSURE LIMITS: *ppm = (mg/M³)(24.45)/MW

Turkborrite Extraodrite Emilitor ppin = (mg/m)(E i: 10)/mm						
All readings in ppm	OSHA PEL'S		ACGIH			
CHEMICAL	TWA	CEILING	TLV	STEL		
lodine	-	.1	-	.1		
Potassium Iodide	-	-	-	-		
Deionized Water	-	-	-	-		

VENTILATION SYSTEM: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

PERSONAL RESPIRATORS (NIOSH APPROVED): If the exposure limit is exceeded and engineering controls are not feasible, a half-face organic vapor respirator may be worn for up to ten times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece organic vapor respirator may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-face piece positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

SKIN PROTECTION: Wear impervious protective clothing, including

SKIN PROTECTION: Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

EYE PROTECTION: Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid Color: Reddish brown. Odor: None reported. Not available. pH: . Vapor Pressure: Negligible. Viscosity: Not available. **Boiling Point:** Not available. Freezing/Melting Point: Not available. Autoignition Temperature: Not applicable. Flash Point: Not applicable. Explosion Limits, lower: Not available. Explosion Limits, upper: Not available **Decomposition Temperature:** Not available. Solubility in water: Soluble in water.

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Specific Gravity/Density: Not available.

SECTION 10: STABILITY AND REACTIVITY

STABLE

UNSTABLE

STABILITY: Stable under ordinary conditions of use and storage.

CONDITIONS TO AVOID (STABILITY): Heat, flames, ignition sources

and incompatibles.

INCOMPATIBILITY (MATERIAL TO AVOID): Not Available HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID (POLYMERIZATION): N/A

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:

LD50/LC50: CAS# 7732-18-5:

Oral, rat: LD50 = 90 mL/kg;

CAS# 7553-56-2:

Oral, mouse: LD50 = 22 gm/kg; Oral, mouse: LD50 = 1000 mg/kg; Oral, rabbit: LD50 = 10 gm/kg;

Oral, rat: LD50 = 10 gm/kg;

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: Not Available

ENVIRONMENTAL: Not Available PHYSICAL: No information available. OTHER: No information available.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved incinerator or disposed in a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION 14: TRANSPORT INFORMATION

US DOT	IMO	IATA	RID/ADR	CANADIAN TDG
Not	Not	Not	Not	Not
Regulated	Regulated	Regulated	Regulated	Regulated

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SECTION 15: REGULATORY INFORMATION

TSCA	CAS# 7681-11-0 is listed on the
	TSCA inventory. CAS# 7553-56-
	2 is listed on the TSCA inventory.
CERCLA/SARA	None of the chemicals in this
	material have an RQ.
Clean Air Act	This material does not contain
	any hazardous air pollutants. This
	material does not contain any
	Class 1 Ozone depletors. This
	material does not contain any
	Class 2 Ozone depletors.
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
ОЗПА	product are considered highly
	hazardous by OSHA
State	Not Available
International Regulations	CAS# 7681-11-0 is listed on
micriational Negulations	Canada's DSL List.CAS# 7681-
	11-0 is listed on Canada's
	Ingredient Disclosure List. CAS#
	7553-56-2 is listed on Canada's
	DSL List.

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