





Section 1. Identification of the Substance/Mixture and the Company

1.1 Product Identifier	Product Name: Lugol's Iodine Solution Product Number: LIS	
1.2 Intended use	EN: Laboratory reagent. For professional use only. DA: Laboratoriereagens. Kun til professionelt brug. DE: Laboratoriumreagens. Alleen voor professioneel gebruik. EL: Αντιδραστήριο εργαστηρίου. Για επαγγελματική χρήση μόνο. ES: Reactivo de laboratorio. Sólo para uso profesional. FR: Réactif de laboratoire. Pour un usage professionnel uniquement. IT: Laboratorio di reagente. Solo per uso professionale. NL: Laboratoriumreagens. Alleen voor professioneel gebruik. PT: Reagente de laboratório. Para uso profissional. SV: Laboratoriereagens. Endast för yrkesmässig användning.	
1.3 Details of the supplier of the safety data sheet	Manufacturer	ScyTek Laboratories, Inc.
	Address	205 South 600 West Logan, Utah 84321 U.S.A.
	Phone Number	800-729-8350
	Fax Number	435-755-0015
	e-mail	msds@scytek.com
	Website	scytek.com

Section 2. Hazards Identification

2.1 Classification: Regulation (EC) No 1272/2008 (CLP)	Specific target organ toxicity Oral (Category 1) – H372 Acute aquatic toxicity (Category 3) – H402
Classification: OSHA 29 CFR 1910.1200 HCS	Specific target organ toxicity Oral (Category 1) – H372 Acute aquatic toxicity (Category 3) – H402
Classification: Directive 1999/45/EC	 <p>Xn R20/21, S23, S25 EN: Harmful DA: Sundhedsskadelig DE: Gesundheitsschädlich EL: Επιβλαβές ES: Nocivo FR: Nocif IT: Nocivo NL: Schadelijk PT: Nocivo SV: Hälsoskadlig</p>




	 <p>N: R50 EN: Dangerous for the environment DA: Miljøfarlig DE: Umweltgefährlich EL: Επικίνδυνο για το περιβάλλον ES: Peligroso para el medio ambiente FR: Dangereux pour l'environnement IT: Pericoloso per l'ambiente NL: Milieugevaarlijk PT: Perigoso para o ambiente SV: Miljöfarlig'</p> <p>For full text of R- & S- phrases: see Section 15.</p>								
2.2 Label Elements	<p>Pictogram(s):</p>  <p>Signal word: Danager</p> <p>Hazard statement(s): H372 – Causes damage to organs through prolonged or repeated exposure (Thyroid). H402 – Harmful to aquatic life</p> <p>Precautionary statement(s): P302+ P352 - IF ON SKIN: Wash with plenty of soap and water P305 + P351 - IF IN EYES: Rinse cautiously with water for several minutes.</p> <p>Precautionary statement(s) not listed on label: P314 – Get medical advice/attention if you feel unwell P273 – Avoid release to the environment</p>								
NFPA Scale: 0-4									
HMIS (U.S.A.) Scale: 0-4	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="background-color: #e6f2ff;">HEALTH</td> <td style="text-align: center;">2</td> </tr> <tr> <td style="background-color: #ffe6e6;">FLAMMABILITY</td> <td style="text-align: center;">0</td> </tr> <tr> <td style="background-color: #ffffe6;">PHYSICAL HAZARD</td> <td style="text-align: center;">0</td> </tr> <tr> <td>PERSONAL PROTECTION</td> <td style="text-align: center;">B</td> </tr> </table>	HEALTH	2	FLAMMABILITY	0	PHYSICAL HAZARD	0	PERSONAL PROTECTION	B
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2.3 Other Hazards	<p>PBT: This mixture does not contain any substances that are assessed to be a PBT. vPvB: This mixture does not contain any substances that are assessed to be a vPvB.</p>								

Section 3. Composition and Information on Ingredients

3.2 Chemical Description: Mixture

*May contain additional non-hazardous proprietary ingredients.

*May contain additional active ingredients at concentrations <0.1%w/v.

Hazardous Ingredients:	CAS#	EC#	GHS Symbols	%
Potassium Iodide	7681-11-0	231-659-4	 Warning. 2 H315 Causes skin irritation. 2 H319 Causes serious eye irritation. 3 H335 May cause respiratory irritation.	≤4
Iodine	7553-56-2	231-442-4	 Warning. 2 H315 Causes skin irritation. 2 H319 Causes serious eye irritation. 3 H302 Harmful if swallowed.  Warning. 1 H400 Very toxic to aquatic life.	≤2

Section 4. First Aid Measures

4.1 Description of first aid measures

Eye Contact: Check for and remove contact lenses. Immediately flush eyes with copious amounts of water and get immediate medical attention.

Skin Contact: Remove contaminated clothing and wash contact area with mild soap and copious amounts of water. Get medical attention if symptoms develop.

Inhalation: If inhaled, remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms worsen.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as collar, tie, belt or waistband. Get immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed

See section 2.2 and 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

Section 5. Fire Fighting Measures

5.1 Extinguishing Media	Extinguish fire using water spray, carbon dioxide, chemical foam, or dry chemical.
5.2 Special hazards arising from the substance or mixture	No unusual fire or explosive hazards expected
5.3 Advice for firefighters	As with any fire, wear personal protection equipment, including a self-contained breathing apparatus (S.C.B.A.)

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear chemical resistant clothing, gloves, and eye protection. Wear NIOSH/MSHA approved breathing apparatus.

6.2 Environmental precautions

Keep material away from heat, flame, ignition sources, and reactive materials. Don't allow product to enter drain.

6.3 Methods and materials for containment and cleaning up

Wipe up or absorb spill using inert absorbent and place in a suitable waste container for disposal.

Section 7. Handling and Storage

7.1 Precautions for safe handling.

Avoid contact with skin and eyes.
Wash thoroughly after handling.
Avoid breathing vapor.

7.2 Conditions for safe storage, including any incompatibilities.

Store in well ventilated area.
Keep container tightly closed.
Store at 15-30 °C.

7.3 Specific end use(s).

See section 1.2

Section 8. Exposure Controls / Personal Protection

8.1 Control parameters	<p>Exposure Limits: Potassium iodide ACGIH: 0.01mg/m³ TWA Iodine OSHA: 0.1ppm C NIOSH 0.1ppm C ACGIH: 0.1 STEL</p>
8.2 Exposure controls	<p>Personal Protective Equipment (PPE): Eye/Face protection. Safety glasses or goggles are required. Skin protection. Protective clothing is required. Hand protection. Chemical resistant gloves are required. Glove material must be resistant to the components of this product. Consult glove manufacturer for specific recommendations of appropriate material and thickness of glove. Respiratory protection. Avoid breathing vapor. Environmental exposure controls. Avoid releasing large quantities into the environment. No additional information.</p>
Engineering Controls	<p>Working area should be adequately large and well ventilated to prevent concentration of vapors. Provide mechanical exhaust ventilation or other engineering controls to keep airborne concentrations of vapors below their respective threshold limits.</p>

Section 9. Physical and Chemical Properties

Physical State	Liquid
Color	Dark amber/brown slightly transparent.
Odor	Slight iodine odor.
Odor Threshold	Unknown
pH	Unknown
Melting Point/ Freezing Point	Unknown
Initial Boiling Point	Unknown
Flash Point	Unknown
Evaporation Rate	Unknown

Flammability (solid, gas)	Unknown
Upper/Lower Flammability Limits	Unknown
Vapor Pressure	Unknown
Vapor Density	Unknown
Relative Density	Unknown
Solubility(ies)	Water
Partition Coefficient: n-octanol/water	Unknown
Auto-Ignition Temperature	Unknown
Decomposition Temperature	Unknown
Viscosity	Unknown
Explosive Properties	Not explosive.
Oxidizing Properties	Unknown

Section 10. Stability and Reactivity

10.1 Reactivity	No relevant data available.
10.2 Chemical Stability	Stable under normal temperatures and pressures.
10.3 Possibility of Hazardous Reactions	No hazardous reactions known.
10.4 Conditions to Avoid	Fire, static electricity, direct sunlight.
10.5 Incompatible Materials	Liquid chlorine, acetaldehyde, ammonia, salt + ethanol, ammonium hydroxide, methyl alcohol, antimony, silver azide, lithium, potassium, sodium, phosphorous, bromine pentafluoride, fluorine, oxygen difluoride, magnesium, finely divided metals, organic solvents, rubber goods, plastics, zinc, aluminum, alkali metals, sulphur, ammonia solutions, Bromine trifluoride, reducing agents, iron, ethanol + butadiene; ethanol + phosphorous; ethanol + methanol + Hg); foramide + pyridine + sulfur trioxide; formamide; halogens or interhalogens; mercuric oxide; metal carbides; oxygen; pyridine; sodium hydride. Violent reaction with iodine and aluminum + diethyl ether...(and) titanium (above 113 deg C) (Iodine).
10.6 Hazardous Decomposition Materials	None known.

Section 11. Toxicological Information

11.1 Information on Toxicological Effects.	<p>Acute Toxicity. No relevant data available</p> <p>Skin Corrosion/Irritation. May be irritating to skin and mucous membranes.</p> <p>Serious Eye Damage/Irritation. May be irritating to eye.</p> <p>Respiratory or skin sensitization. No relevant data available.</p> <p>Germ Cell Mutagenicity. No relevant data available.</p>
Carcinogenicity.	<p>International Agency for Research on Cancer (IARC). None of the components are listed.</p> <p>National Toxicology Program (NTP). None of the components are listed.</p>

Section 12. Ecological Information

12.1 Toxicity	Fish: No relevant studies identified. Crustacea: No relevant studies identified. Algae/Aquatic Plants: No relevant studies identified. Other Organisms: No relevant studies identified.
12.2 Persistence and Degradability.	No relevant studies identified.
12.3 Bioaccumulative Potential.	No relevant studies identified.
12.4 Mobility in Soil.	Miscible in water. May spread in water systems. This component is non-volatile.
Additional Remarks	None.
12.5 Results of PBT and vPvB Assessment.	PBT: This mixture does not contain any substances that are assessed to be a PBT. vPvB: This mixture does not contain any substances that are assessed to be a vPvB.

Section 13. Disposal Considerations

13.1 Waste Disposal Methods.	Sewage disposal is discouraged. Waste should not be disposed of by release to sewers. Dispose waste in accordance with federal, state and local environmental control regulations.
Product/Packaging Disposal.	Final decisions on the appropriate waste management method must be in line with local, regional and national regulations.
Other Disposal Recommendations.	No relevant data available.

Section 14. Transport Information

14.1 UN Number DOT, IATA,IMDG, ADR	DOT: Not dangerous goods ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods
14.2 UN Proper Shipping Name DOT, IATA,IMDG, ADR	ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods DOT: Not dangerous goods
14.3 Transport Hazard Class(es)	DOT: Not dangerous goods IATA: Not dangerous goods IMDG: Not dangerous goods ADR/RID: Not dangerous goods
14.4 Packing Group DOT, IATA,IMDG, ADR	ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods DOT: Not dangerous goods
14.5 Environmental Hazards	Marine Pollutant: No
14.6 Special Precautions for User	Not applicable.

Section 15. Regulatory Information

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture.	
Extremely Hazardous Substances; Section 355	None of the components in this mixture are listed.

Toxic Substances Control Act; TSCA	All of the components in this mixture are listed.
California Proposition 65	None of the components in this mixture are listed.
Right To Know Components	<p><u>Potassium Iodide</u> Pennsylvania New Jersey</p> <p><u>Iodine</u> Massachusetts Pennsylvania New Jersey</p>
15.2 Chemical Safety Assessment	No Chemical Safety Assessment has been carried out for this substance/mixture by ScyTek Laboratories, Inc.
R phrases	<p>R20/21 EN: Harmful by inhalation and in contact with skin. DA: Farlig ved indånding og ved hudkontakt. DE: Gesundheitsschädlich beim Einatmen und bei Berührung mit der Haut. EL: Επιβλαβές όταν εισπνέεται και σε επαφή με το δέρμα. ES: Nocivo por inhalación y en contacto con la piel. FR: Nocif par inhalation et par contact avec la peau. IT: Nocivo per inalazione e contatto con la pelle. NL: Schadelijk bij inademing en bij aanraking met de huid. PT: Nocivo em contacto com a pele. SV: Farligt vid inandning och hudkontakt.</p> <p>R50 EN: Very toxic to aquatic organisms. DA: Meget giftig for organismer, der lever i vand. DE: Sehr giftig für Wasserorganismen. EL: Πολύ τοξικό για τους υδρόβιους οργανισμούς. ES: Muy tóxico para los organismos acuáticos. FR: Très toxique pour les organismes aquatiques. IT: Altamente tossico per gli organismi acquatici. NL: Zeer vergiftig voor in het water levende organismen. PT: Muito tóxico para os organismos aquáticos. SV: Mycket giftigt för vattenlevande organismer.</p>
S phrases	<p>S23 EN: Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer). DA: Undgå indånding af gas/røg/dampe/aerosol-tåger (den eller de pågældende betegnelser angives af fabrikanten). DE: Gas/Rauch/Dampf/Aerosol nicht einatmen (geeignete Bezeichnung(en) vom Hersteller anzugeben). EL: Μην αναπνέετε αέρια/αναθυμιάσεις/ατμούς/εκνεφώματα (η κατάλληλη διατύπωση καθορίζεται από τον παραγωγό). ES: No respirar los gases/humos/vapores/aerosoles (denominación(es) adecuada(s) a especificar por el fabricante). FR: Ne pas respirer les gaz/fumées/vapeurs/aérosols (terme(s) approprié(s) à indiquer par le fabricant). IT: Non respirare i gas/fumi/vapori/aerosoli (termine(i) appropriato(i) da precisare da parte del produttore). NL: Gas/rook/damp/spuitnevel niet inademen. (toepasselijke term(en) aan te geven door de fabrikant). PT: Não respirar os gases/vapores/fumos/aerossóis (termo(s) apropriado(s) a indicar pelo produtor). SV: Undvik inandning av gas/rök/ånga/dimma (lämplig formulering anges av tillverkaren).</p> <p>S25 EN: Avoid contact with eyes. DA: Undgå kontakt med øjnene. DE: Berührung mit den Augen vermeiden.</p>

	<p>EL: Αποφεύγετε την επαφή με τα μάτια. ES: Evítese el contacto con los ojos. FR: Éviter le contact avec les yeux. IT: Evitare il contatto con gli occhi. NL: Aanraking met de ogen vermijden. PT: Evitar o contacto com os olhos. SV: Undvik kontakt med ögonen.</p> <p>S61 EN: Avoid release to the environment. Refer to special instructions/Safety data sheets. DA: Undgå udledning til miljøet. Se særlig vejledning/leverandørbrugsanvisning. DE: Freisetzung in die Umwelt vermeiden. Besondere Anweisungen einholen/Sicherheitsdatenblatt zu Rate ziehen. EL: Αποφύγετε την ελευθέρωσή του στο περιβάλλον. Αναφερθείτε σε ειδικές οδηγίες/ελτίο δεδομένων ασφαλείας. ES: Evítese su liberación al medio ambiente. Recábense instrucciones específicas de la ficha de datos de seguridad. FR: Éviter le rejet dans l'environnement. Consulter les instructions spéciales/la fiche de données de securite. IT: Non disperdere nell'ambiente. Riferirsi alle istruzioni speciali/ schede informative in materia di sicurezza. NL: Voorkom lozing in het milieu. Vraag om speciale instructies/veiligheidskaart. PT: Evitar a libertação para o ambiente. Obter instruções específicas/fichas de segurança. SV: Undvik utsläpp till miljön. Läs särskilda instruktioner/varuinformationsblad.</p>
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Section 16. Other Information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. ScyTek Laboratories shall not be held liable for any damage resulting from handling or from contact with the above product.