




Chemical Safety Practices Recommendations

Lugol's Solution (5% Iodine 10% Potassium Iodide Solution)

Exposure Hazards (1, 2)			
<p>Category 1 Danger</p>  <p>Respiratory Sensitizer May cause allergy or asthma symptoms or difficulty breathing if inhaled.</p>	<p>Category 2 Danger Toxic</p>  <p>Fatal if swallowed.</p>	<p>Category 2 Warning</p>  <p>Eye Irritation Causes serious eye irritation.</p>	
Response to Exposure			
Oral	Dermal	Inhalation	Injection
Rinse mouth; do not induce vomiting. Report to OHS.	Wash skin with soap and water for 15 minutes. Rinse eyes for 15 minutes. Report to OHS.	Leave area; go to clean air. Report to OHS.	Report to OHS.
Special Precautions	Iodine vapor irritates eyes, throat, and lungs before you can smell it. (3)		
Personal Protective Equipment	Gloves (Latex or Nitrile) Skin Protection (Suit or Scrubs or Lab Coat) Eye Protection (Safety-glasses or Goggles) Closed-toe shoes		
Engineering Controls	Manipulate stock solution in a chemical fume hood. Dilute solutions should not present an inhalation hazard if used in a well-ventilated area.		
Animal Handling	Handle as nonhazardous.		
Bedding Disposal	Handle as nonhazardous.		
Work Practices	Follow LASP SOPs for preparation, handling, dosing, and disposal of Lugol's solution.		

References:

1. Nations U. GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS) 5th ed 2013.
2. John Risher SK. Concise International Chemical Assessment Document 72. Geneva, Switzerland: World Health Organization, 2009 Contract No.: 72.
3. Ruth JH. Odor thresholds and irritation levels of several chemical substances: a review. American Industrial Hygiene Association journal. 1986;47(3):A142-51.

Questions or concerns: Please contact EHS, Ted Witte, theodore.witte@nih.gov or 301-846-5860
 Reviewed 12/03/2014 *These recommendations are not final and may be updated.*