Safety Data Sheet

Lugol's Iodine Working Solution

Revision Date: 1/09/19

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier — Trade name: Lugol's Iodine, Working Solutin
Product code(s): 6583-02, 6583-16

1.2 Relevant identified uses — Laboratory Reagent

Supplier: — Astral Diagnostics Inc.

800-441-0366 Technical Service
Monday-Friday: 8:00 -5:00 PM

Synonym: None.
Material uses: Laboratory Reagent.
Validation date: 12/11/2013
In case of emergency: 800-424-9300 CHEMTREC (USA)
24 Hours/Day: 7 Days/Week

2. HAZARDS IDENTIFICATION

Emergency Overview:

GHS Label Elements: Pictogram

Signal Word: Warning

Hazard statement(s):

H302: Harmful is swallowed
H319: Causes serious eye irritation

Precautionary statement(s):

P264: Wash exposed skin thoroughly after handling
P270: Do not eat, drink or smoke when using this product
P280: Wear protective gloves/ eye protection/ face protection.
P305+351+338: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

NFPA Rating	HMIS Classification
Health hazard: 1	Health hazard: 1
Fire: 0	Flammability: 0
Reactivity Hazard: 0	Physical hazards: 0

Potential Health Effects : Inhalation – May cause respiratory tract irritation.

Skin - May cause skin irritation.
Eyes - May cause eye irritation.
Ingestion – Potentially toxic if swallowed in large quantities.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Name	CAS number	% by volume
Potassium Iodine	7681-11-0	~.7
Iodine	7553-56-2	~.4
Water	7732-18-5	Balance

4. FIRST AID MEASURES

First-aid measures general: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation: *Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.*

First-aid measures after skin contact: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a poison center or doctor/physician.

First-aid measures after eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.

First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media: Do not use a heavy water stream

5.2 Special hazards arising from the substance or mixture

No additional information available

5.3 Advice for firefighters

Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water form entering environment. Do not enter fire area without proper protective equipment, including respiratory protection.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment: Gloves. Safety glasses. Combined gas/dust mask with filter type B/P3.
Emergency procedures: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment: Equip cleanup crew with proper protection.
Emergency procedures: Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Precautions for safe handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not breathe mist, vapors, spray. Obtain special instructions before use. Use personal protective equipment as required. Do not handle until all safety precautions have been read and understood.
Hygiene measures: Wash exposed skin thoroughly after handling. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures: Comply with applicable regulations.
Storage conditions: Keep container closed when not in use. Protect from sunlight. Store in a well-ventilated place.
Incompatible products: Strong oxidizers. Strong reducing agents. Strong bases.
Incompatible materials: Sources of ignition. Direct sunlight

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Component	Source	Type	Value	Note
Iodine	ACGIH	TWA	0.1 mg/m3	
	ACGIH	TWA	0.01 ppm	
	OSHA	PEL (Ceiling)	1 mg/m3	
	OSHA	PEL (Ceiling)	0.1 ppm	
Potassium Iodine	ACGH	TWA	0.01 ppm	

8.2. Exposure controls

Personal protective equipment: Safety glasses. Gloves. Protective clothing. High gas/vapor concentration: gas mask with filter type B.
Hand protection: Wear protective gloves.
Eye protection: Chemical goggles or face shield.
Skin and body protection: Wear suitable protective clothing.
Respiratory protection: Wear appropriate mask. Gas mask with filter type B.
Other information: Do not eat, drink or smoke during use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid.
Color: amber
Flash Point: NA
Odor: NA
pH: NA
Boiling/condensation point: NA
Melting/freezing point: NA
Relative density: NA
Vapor pressure: NA
Vapor density: NA
Odor threshold: NA
Evaporation rate: NA
VOC: NA
Solubility: Soluble in the following materials: water

10. STABILITY AND REACTIVITY

10.1. Reactivity

No further relevant information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Extremely high or low temperatures.

10.5. Incompatible materials

Metals. Strong reducing agents. Ammonia

10.6. Hazardous decomposition products

Iodine Vapor. Potassium oxide.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Iodine (7553-56-2)

LD50 Oral Rat	14000 mg/kg
ATE US (oral)	14000 mg/kg body weight
ATE US (dermal)	220 mg/kg body weight

Acute toxicity

No data available

Inhalation: No data available

Dermal: No data available

Skin Corrosion/irritation

No data available

Serious eye damage/eye irritation

Causes serious eye irritation

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

12. ECOLOGICAL INFORMATION

Toxicity:

Iodine

LC50 fish 1: 1.7 mg/l

EC50 Daphnia 1: 0.2 mg/l

Potassium Iodine

LC50 fish 1: 3200 mg/l

EC50 Daphnia 1: 2.7 mg/l 24h

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

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

DOT (US)
Not Regulated

15. REGULATORY INFORMATION

15.1 US Federal Regulations
Iodine, Potassium Iodide
Listed on the US TSCA (Toxic Substances Control Act) inventory
SARA Sections 311/312 Hazard Classes
Immediate (acute) health hazard
15.2 International regulations
Iodine, Potassium Iodide
Listed on the Canadians DSL (Domestic Substances List)
WHMIS Classification- Class D Division 2 Subdivision B Toxic material causing other toxic effects
15.3 US State Regulations
California Proposition 65- This product does not contains any substances known to the state of California to cause cancer, developmental and/or reproductive harm

16. OTHER INFORMATION

National Fire Protection Association (U.S.A.)

Notice to reader
This Safety Data Sheet has been prepared in accordance with the Globally Harmonized System for the Classification and Labeling of Chemicals (GHS). To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries makes any warranty of merchantability or any other warranty, expressed or implied, which respect to such information, and we assume no liability resulting from its use. In no event shall Astral Diagnostics, Inc be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages resulting from use of or reliance upon this information.