Material Safety Data Sheet



Dilute Lugol's Solution

Revised: 02/22/2012 **Replaces:** 11/18/2011 **Printed:** 08/10/2012

Carolina Biological Supply Company

2700 York Rd | Burlington, NC 27215 • to order: 800.334.5551 • for support: 800.227.1150



Section 1 - Product Description

Product Name: Iodine Potassium Iodide, 2% **Product Code(s):** 97-2140, 974897, C90034

Size: Various

Chemical Name: See Section 3

CAS Number:

Formula: See Section 3

Synonyms: Dilute Lugol's Solution

Distributor: Carolina Biological Supply Company, 2700 York Road, Burlington, NC 27215

Chemical Information: 800-227-1150 (8am-5pm (ET) M-F) Chemtrec 800-424-9300 (Transportation Spill Response 24

hours)

Section 2 - Hazard Identification

Emergency Overview: Harmful by inhalation and if swallowed. Irritating to eyes and skin. Avoid contact with skin and eyes.

Potential Health Effects:

Eyes: May cause irritation. **Skin:** May cause irritation to skin.

Ingestion: May cause gastrointestinal discomfort. **Inhalation:** May cause irritation to respiratory tract.

Section 3 - Composition / Information on Ingredients

Principal Hazardous Components: Iodine (CAS # 7553-56-2) 2%; Potassium Iodide (CAS # 7681-11-0) 2%

TLV units:

PEL units: Iodine - STEL - 0.1 ppm

Section 4 - First Aid Measures

Emergency and First Aid Procedures:

Eyes - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Skin - After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. **Ingestion** - If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Inhalation - In case of accident by inhalation: remove casualty to fresh air and keep at rest.

Section 5 - Firefighting Procedures

Flash Point (Method Used): N/A

NFPA Rating:

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Health: 1 Fire: 0 Reactivity: 0

Extinguisher Media: Use media suitable to extinguish surrounding fire.

Flammable Limits in Air % by Volume: N/A

Autoignition Temperature: N/A

Special Firefighting Procedures: Firefighters should wear full protective equipment and NIOSH approved self-contained

breathing apparatus.

Unusual Fire and Explosion Hazards: None

Section 6 - Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled: Ventilate area of spill. Eliminate all sources of ignition. Remove all non-essential personnel from area. Clean-up personnel should wear proper protective equipment and clothing. Absorb material with suitable absorbent and containerize for disposal.

Section 7 - Special Precautions

Precautions to Take in Handling or Storing: Avoid contact with skin and eyes. Do not ingest or take internally. Suitable for any general chemical storage.

Section 8 - Protection Information

Respiratory Protection (Specify Type): None needed under normal conditions of use with adequate ventilation. A NIOSH/MSHA chemical cartridge respirator should be worn if PEL or TLV is exceeded.

Ventilation:

Local Exhaust: Acceptable Mechanical(General): Yes

Special: No **Other:** No

Protective Gloves: Natural rubber, Neoprene, PVC or equivalent. **Eye Protection:** Splash proof chemical safety goggles should be worn.

Other Protective Clothing or Equipment: Lab coat, apron, eye wash, safety shower.

Section 9 - Physical Data

Molecular Weight: N/A **Melting Point:** approx. 0°C (32°F)

Boiling Point: approx. 100°C (212°F) **Vapor Pressure:** N/A

Vapor Density(Air=1): N/A **Specific Gravity (H2O=1):** approx. 1 **Percent Volatile by Volume:** N/A **Evaporation Rate (BuAc=1):** N/A

Solubility in Water: Soluble **Appearance and Odor:** Dark purple liquid with slight odor

Section 10 - Reactivity Data

Stability: Stable

Conditions to Avoid: Heat and sources of ignition.

Incompatibility (Materials to Avoid): Ammonia, Aldehydes, Azides Hydrides,

Hazardous Decomposition Products: Free Iodine **Hazardous Polymerization:** Will not occur

Section 11 - Toxicity Data

Toxicity Data: LD50 Rabbit oral 10 g/kg

LD50 Rat oral 14 g/kg **Effects of Overexposure: Acute:** See Section 2

Chronic: Not listed as a carcinogen by IARC, NTP or OSHA.

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Conditions Aggravated by Overexposure: Respiratory disorders,

Target Organs: Gastrointestinal tract,

Primary Route(s) of Entry: Inhalation, ingestion, eye or skin contact.

Section 12 - Ecological Data

EPA Waste Numbers: N/A

Section 13 - Disposal Information

Waste Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.

Section 14 - Transport Information

DOT Proper Shipping Name: Not Regulated

Section 15 - Regulatory Information

EPA TSCA Status: On TSCA Inventory

Hazard Category for SARA Section 311/312 Reporting: Acute

Name List: Chemical Category:

No No

CERCLA Section 103 RQ(lb.): No

RCRA Section 261.33: No

Section 16 - Additional Information

The information provided in this Material Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the Material Safety Data Sheet. Any employer must carefully assess the applicability of any information contained herein in regards to the particular use to which the employer puts the material.

Glossary

ACGIH American Conference of Governmental Industrial Hygienists

CAS Number Chemical Services Abstract Number

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

DOT U.S. Department of Transportation

IARC International Agency of Research on Cancer

N/A Not Available

NTP National Toxicology Program

OSHA Occupational Safety and Health Administration

PEL Permissible Exposure Limit

ppm Parts per million

RCRA Resource Conservation and Recovery Act
SARA Superfund Amendments and Reauthorization Act

TLV Threshold Limit Value

TSCA Toxic Substances Control Act

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