

Material Safety Data Sheet

Lugol's Solution

MSDS, Rev. 2

Last revised: 08-July-2008

Approved for Use: 08-July-2009

1. Chemical product and company identification

Product Name: Lugol's Solution

Premier Dental Products Company

1710 Romano Drive

Plymouth Meeting, PA 19462

PH: 610-239-6000 FAX 610-239-6171

2. Composition / Information on Ingredients

Hazardous ingredients: None

Chemical Name:	CAS Number:	OSHA PEL	ACGIH TLV	Composition % (optional)
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Iodine		5% by weight		
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Potassium Iodide		10% by weight		
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Dist. Water (acidified)		95%		
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LD50/LC50: N/A

3. Hazards Identification

Health Hazards (Acute and Chronic):

Ingestion: May cause discomfort/diarrhea or stomach distress

Eye Contact: May cause irritation and redness

Inhalation: May irritate the upper respiratory tract and mucus membranes

Skin: Prolonged contact may irritate skin and cause redness to occur

Signs and Symptoms of Exposure:

Ingestion: Burning or irritation to mouth and esophagus, stomach pain or discomfort

Eye Contact: Burning, irritation and redness of eyes

Skin Contact: Irritation and redness

Inhalation: Sneezing, irritation to nose/throat, lung congestion and possible light headedness

4. First Aid Measures

Emergency and First Aid Procedures:

Skin contact: Wash thoroughly with tap water

Eye contact: Flush immediately with water for at least 15 minutes. Seek medical attention if irritation persists.

Ingestion: Do Not Induce Vomiting. Never administer anything by mouth to an unconscious person. If conscious, drink large quantities of water and seek medical attention immediately.

Inhalation: Remove to fresh air. If having difficulty breathing, contact emergency personnel immediately.

5. Fire-Fighting Measures

Flash Point (Method Used): N/A **Explosive Limits:** *LEL:* N/A *UEL:* N/A

Extinguishing Media: Any type

Special Fire Fighting Procedures: Use self contained breathing apparatus and protective equipment.

Unusual Fire Hazards: None

Stability: *Unstable:* *Stable:* Closed vial only. *Conditions to Avoid:* Do not open vial until ready to use.

Incompatibility (Materials to Avoid): Avoid oxidizing agents and acids. Avoid contact with bare aluminum or any other metal containers. Use glass vessels if possible. The solution will make purple coloration with plastic wares (HD or LD polyethylene) or all metal containers.

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Hazardous Decomposition/By Products: Iodide/peroxide or peroxy iodide salts of unknown nature.

Hazardous Polymerization: *May Occur:* Purple coloration, temporary or permanent.
Will Not Occur: X *Conditions to Avoid:* Provide above

6. Accidental Release Measures

Personal Precautions: Use medical gloves and lab coat when at all times when handling this product.

Environmental Precautions: Use an exhaust fan to remove vapors from a closed area.

Clean-up Procedures: Sweep/shovel into container for future disposal. Wash area with water/bleach solution, detergent or silver chloride solution.

7. Handling and Storage

Handling Requirements: Keep out of reach of children

Storage Conditions: Do not store in aluminum, carbon steel, copper, copper alloys, zinc or nickel containers. Store in a cool dry place in amber glass containers only.

Suitable Packaging: Amber glass containers only.

8. Exposure Controls / Personal Protection:

Respiratory Protection (Specify Type): Do not directly inhale fumes from opened vials, especially freshly opened vials.

Ventilation: *Local Exhaust:* X *Special:* Preferably store product in cabinet

Mechanical (General):

Other:

Hand Protection: Protective gloves recommended

Eye Protection: Safety glasses recommended

Skin Protection: General work/lab wear

9. Physical and Chemical Properties

Boiling Point: Not established

Vapor Pressure (mmHg): equal to water

Vapor Density (Air-1): N/A

Order Threshold: N/A

Coefficient of Water/Oil Distribution: N/A

Scooped Density: N/A

Appearance and Odor: Dark brown or purple. Acidic iodine (pungent) odor.

Specific Gravity (H₂O=1): N/D

Percent Volatile by Volume (%): N/A

Evaporation Rate (nBuOAc-1): 10%

Freezing Point: -15° C or lower

pH (1% solution): 4-5 at room temp.

Solubility in Water: Completely miscible

Reserve Alkalinity: N/D

10. Stability and Reactivity

Possible Hazardous Reactions/Conditions: None known

Conditions to Avoid: Avoid strong oxidizing agents or any metal

Materials to Avoid: Strong oxidizing agents and all fabrics

Hazardous Decomposition Products: None established

Other Recommendations: Read and follow all directions for use.

11. Toxicological Information

Hazardous Ingredients: 5% iodine in water

Rate of Exposure: Do not inhale vapors

12. Ecological Information

Hazardous Ingredients: None

Mobility: N/A

Persistence and Degradability: N/A

Bioaccumulative Potential: N/A

Other Adverse Effects: N/D

13. Disposal Considerations:

Waste Disposal Method: Sweep/drain to disposal system. Wash area with plenty of water. Material will easily dissolve so that it can be drained into disposable containers.

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DISPOSAL IS TO BE PERFORMED IN COMPLIANCE WITH ALL FEDERAL, STATE/PROVINCIAL AND LOCAL REGULATIONS.

14. Transport Information:

DOT: Non-Hazardous. Observe normal precautions for transporting liquid filled glass containers.

All ingredients are listed on the TSCA list

Product does not contain any chemical required to be reported under SARA 313.

15. Regulatory Information:

Hazard Symbols: None

Risk Phrases: N/A

Note:

16. Other Information

Other Information:

Hazard Rating:	Health: 1	4=EXTREME
	Flammability: 0	3=HIGH
	Reactivity: 0	2=MODERATE
		1=SLIGHT

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