



# Material Safety Data Sheet

## Povidone-Iodine Solution

Issue date Jan. 17/2011

### 1. Product and Company Identification

<b>Product Name</b>	<b>Povidone Iodine Solution</b>
<b>CAS #</b>	Mixture
<b>Product use</b>	Antiseptic
<b>Manufacturer</b>	Lernapharm (Loris) Inc 2323 Halpern, St-Laurent (Montreal) Québec, Canada H4S 1S3 Telephone: 514-331-4634

### 2. Hazards Identification

<b>Emergency overview</b>	CAUTION CAUSES EYE IRRITATION. May cause chronic toxic effects
<b>Potential short term health effects</b>	
<b>Routes of exposure</b>	Eye, Skin contact, Skin absorption, Inhalation, Ingestion.
<b>Eyes</b>	Causes irritation.
<b>Skin</b>	In case of skin irritation, discontinue use of the product. Topical application of povidone-iodine elevates serum concentrations of iodine.
<b>Inhalation</b>	Not a normal route of exposure. May cause respiratory tract irritation.
<b>Ingestion</b>	Not a normal route of exposure. May cause stomach distress, nausea or vomiting.
<b>Target organs</b>	Eyes. Skin.
<b>Chronic effects</b>	Prolonged or repeated exposure can cause drying, defatting and dermatitis.
<b>Signs and symptoms</b>	Symptoms may include redness, edema, drying, defatting and cracking of the skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

### 3. Composition / Information on Ingredients

<b>Ingredient(s)</b>	<b>CAS #</b>	<b>Percent</b>
2-Pyrrolidinone, 1-ethenyl-, homopolymer, compound with iodine	25655-41-8	7 - 13

### 4. First Aid Measures

<b>First aid procedures</b>	
<b>Eye contact</b>	Flush with cool water. Remove contact lenses, if applicable, and continue flushing. Obtain medical attention if irritation persists.
<b>Skin contact</b>	In case of skin irritation, discontinue use of product.
<b>Inhalation</b>	Not a normal route of exposure. If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention.
<b>Ingestion</b>	Not a normal route of exposure. Do not induce vomiting. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.

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### Notes to physician

#### General advice

Symptoms may be delayed.

If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children. Avoid contact with eyes.

## 5. Fire Fighting Measures

### Flammable properties

Not flammable by WHMIS/OSHA criteria.

### Extinguishing media

#### Suitable extinguishing media

Treat for surrounding material.

#### Unsuitable extinguishing media

Not available

### Protection of firefighters

#### Specific hazards arising from the chemical

Not available

#### Protective equipment for firefighters

Firefighters should wear full protective clothing including self contained breathing apparatus.

### Hazardous combustion products

May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Iodine.

### Explosion data

#### Sensitivity to mechanical impact

Not available

#### Sensitivity to static discharge

Not available

## 6. Accidental Release Measures

### Personal precautions

Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.

### Methods for containment

Prevent entry into waterways, sewers, basements or confined areas.

### Methods for cleaning up

Pick up and discard.

## 7. Handling and Storage

### Handling

Use good industrial hygiene practices in handling this material.

### Storage

Keep out of reach of children. Store in a closed container away from incompatible materials.

## 8. Exposure Controls / Personal Protection

### Exposure limits

### Exposure Limits

#### Ingredient(s)

#### ACGIH-TLV

2-Pyrrolidinone, 1-ethenyl-, homopolymer, compound with iodine

Not established



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### OSHA-PEL

Not established

#### Engineering controls

General ventilation normally adequate.

#### Personal protective equipment

**Eye / face protection**

Follow standard industrial hygiene practices.

**Hand protection**

Follow standard industrial hygiene practices.

**Skin and body protection**

As required by employer code.

**Respiratory protection**

Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.

#### General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

## 9. Physical & Chemical Properties

**Appearance**

Liquid saturated on pad / Swabstick saturated with liquid

**Color**

Yellow to Dark reddish brown

**Odor**

iodine

**Odor threshold**

Not available

**Physical state**

Solid

**pH**

Not available

**Melting point**

Not available

**Freezing point**

Not available

**Boiling point**

97.22 °C (207 °F)

**Flash point**

Not available

**Evaporation rate**

Not available

**Flammability limits in air, lower, % by volume** Not available

**Flammability limits in air, upper, % by volume** Not available

**Vapor pressure**

Not available

**Vapor density**

Not available

**Specific gravity**

Not available

**Octanol/water coefficient**

Not available

**Solubility (H<sub>2</sub>O)**

Pad is not soluble/Stick is not soluble

**Auto-ignition temperature**

Not available

**VOC (Weight %)**

Not available

**Viscosity**

Not available

**Percent volatile**

Not available

## 10. Chemical Stability & Reactivity Information

**Chemical stability**

Stable under recommended storage conditions.

**Conditions to avoid**

Do not mix with other chemicals.

**Incompatible materials**

Caustics. Oxidizers. Reducing agents.

**Hazardous decomposition products**

May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Iodine.

**Possibility of hazardous reactions**

Hazardous polymerization does not occur.

## 11. Toxicological Information

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### Component analysis - LC50

**Ingredient(s)**

2-Pyrrolidinone, 1-ethenyl-, homopolymer, compound with iodine

**LC50**

Not available

### Component analysis - Oral LD50

**Ingredient(s)**

2-Pyrrolidinone, 1-ethenyl-, homopolymer, compound with iodine

**LD50**

8100 mg/kg mouse; 8000.1 mg/kg rat

### Effects of acute exposure

**Eye**

Causes irritation.

**Skin**

In case of skin irritation, discontinue use of the product. Topical application of povidone-iodine elevates serum concentrations of iodine.

**Inhalation**

Not a normal route of exposure. May cause respiratory tract irritation.

**Ingestion**

Not a normal route of exposure. May cause stomach distress, nausea or vomiting.

**Sensitization**

Non-hazardous by WHMIS/OSHA criteria.

**Chronic effects**

Chronic ingestion of iodides may produce 'iodism' which is characterized by skin rash, nasal discharge, sneezing, fever, headaches, weakness, anemia and loss of weight.

**Carcinogenicity**

Non-hazardous by WHMIS/OSHA criteria.

**Mutagenicity**

Non-hazardous by WHMIS/OSHA criteria.

**Reproductive effects**

Non-hazardous by WHMIS/OSHA criteria.

**Teratogenicity**

Non-hazardous by WHMIS/OSHA criteria.

## 12. Ecological Information

**Ecotoxicity**

Not available

**Environmental effects**

Not available

**Aquatic toxicity**

Not available

**Persistence / degradability**

Not available

**Bioaccumulation / accumulation**

Not available

**Partition coefficient**

Not available

**Mobility in environmental media**

Not available

**Chemical fate information**

Not available

**Other adverse effects**

Not available

## 13. Disposal Considerations

**Waste codes**

Not available

**Disposal instructions**

Discard after single use. Review federal, state/provincial, and local government requirements prior to disposal. Discard with solid waste. Dispose in accordance with all applicable regulations.

**Waste from residues / unused products**

Not available

**Contaminated packaging**

Not available



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## Povidone-Iodine Solution

### 14. Transport Information

<b>U.S. Department of Transportation (DOT)</b>	Not regulated as dangerous goods.
<b>Transportation of Dangerous Goods (TDG - Canada)</b>	Not regulated as dangerous goods.

### 15. Regulatory Information

**Canadian federal regulations** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

**US Federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200 due to the presence of listed sensitizers. All components are on the U.S. EPA TSCA Inventory List.

#### Occupational Safety and Health Administration (OSHA)

**29 CFR 1910.1200 hazardous chemical** Yes

**CERCLA (Superfund) reportable quantity** N/A

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories**

Immediate Hazard	- Yes
Delayed Hazard	- Yes
Fire Hazard	- No
Pressure Hazard	- No
Reactivity Hazard	- No

**Section 302 extremely hazardous substance** No

**Section 311 hazardous chemical** Yes

**Clean Air Act (CAA)** Not available

**Clean Water Act (CWA)** Not available

**Safe Drinking Water Act (SDWA)** Not available

**Drug Enforcement Agency (DEA)** Not available

**Food and Drug Administration (FDA)** Not available

**WHMIS classification** Exempt - Registered product - (NHP see above)

**State regulations** This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

### 16. Other Information

**Disclaimer** Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

**Recommended use** For external use only.  
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