



# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Material name** LITHIUM IODIDE, REAGENT  
**Catalog #** 940  
**Version #** 02  
**Revision date** 24-Jun-2009  
**CAS #** 7790-22-9  
**CAS #** 10377-51-2  
**Manufacturer information** GFS Chemicals, Inc.  
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## 2. Hazards Identification

**Emergency overview** May cause irritation to the respiratory system. Exposure to powder or dusts may be irritating to eyes, nose and throat.

**OSHA regulatory status** This product is considered not hazardous under 29 CFR 1910.1200 (Hazard Communication).

**Potential health effects**

**Routes of exposure** Inhalation. Eye contact.

**Eyes** Dust or powder may irritate eye tissue.

**Skin** Health injuries are not known or expected under normal use.

**Inhalation** Inhalation of dusts may cause respiratory irritation.

**Ingestion** Health injuries are not known or expected under normal use.

**Potential environmental effects** Ecological injuries are not known or expected under normal use.

## 3. Composition / Information on Ingredients

Non-hazardous components	CAS #	Percent
LITHIUM IODIDE TRIHYDRATE	7790-22-9	90 - 100

## 4. First Aid Measures

**First aid procedures**

**Eye contact** Rinse with water. Get medical attention if irritation develops or persists.

**Skin contact** Rinse skin with water/shower. Get medical attention if irritation develops or persists.

**Inhalation** If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.

**Ingestion** Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.

**General advice** If you feel unwell, seek medical advice (show the label where possible).

## 5. Fire Fighting Measures

**Flammable properties** The product is not flammable. Not a fire hazard.

**Extinguishing media**

**Suitable extinguishing media** Water. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>). Use extinguishing agent suitable for type of surrounding fire.

## Protection of firefighters

**Protective equipment and precautions for firefighters** In the event of fire, cool tanks with water spray. Use water spray to cool unopened containers. Cool containers exposed to flames with water until well after the fire is out.

**Specific methods** In the event of fire, cool tanks with water spray. Use water spray to cool unopened containers.

## 6. Accidental Release Measures

**Personal precautions** Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained.

**Environmental precautions** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation. Following product recovery, flush area with water.

## 7. Handling and Storage

**Handling** Use only with adequate ventilation. Wash thoroughly after handling. Handle and open container with care.

**Storage** Use care in handling/storage. Keep the container tightly closed and dry.

## 8. Exposure Controls / Personal Protection

**Engineering controls** Ensure adequate ventilation, especially in confined areas.

### Personal protective equipment

**Respiratory protection** No personal respiratory protective equipment normally required. Dust safety masks are recommended when the dust concentration is more than 10 mg/m<sup>3</sup>.

**Hand protection** Not normally needed.

**Eye / face protection** Safety glasses.

**Skin protection** No special protective equipment required.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice.

**General** Not normally needed.

## 9. Physical & Chemical Properties

**Appearance** Crystalline.  
**Color** White.  
**Odor** Odorless.  
**Odor threshold** Not available.  
**Physical state** Solid.  
**Form** Solid.  
**pH** 5.5 - 8.5 (5% aqueous solution.)  
**Melting point** 163.4 °F (73 °C)  
**Freezing point** Not available.  
**Boiling point** Not available.  
**Flash point** Not available.  
**Evaporation rate** Not available.  
**Flammability** Not available.  
**Flammability limits in air, upper, % by volume** Not available.  
**Flammability limits in air, lower, % by volume** Not available.  
**Vapor pressure** Not available.  
**Vapor density** Not available.  
**Specific gravity** 3.5  
**Relative density** Not available.  
**Solubility (water)** 1510 g/l @ 20 C

<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Molecular weight</b>	187.8900
<b>Molecular formula</b>	LiI.3H2O

## 10. Chemical Stability & Reactivity Information

<b>Chemical stability</b>	Stable at normal conditions.
<b>Conditions to avoid</b>	Exposure to light. Exposure to air or moisture over prolonged periods.
<b>Incompatible materials</b>	None known.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

## 11. Toxicological Information

<b>Carcinogenicity</b>	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
<b>Further information</b>	This product has no known adverse effect on human health.

## 12. Ecological Information

<b>Ecotoxicity</b>	This product has no known eco-toxicological effects.
<b>Persistence and degradability</b>	Not available.

## 13. Disposal Considerations

<b>Disposal instructions</b>	This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose in accordance with all applicable regulations.
<b>Waste from residues / unused products</b>	Not applicable.

## 14. Transport Information

<b>DOT</b>	Not regulated as dangerous goods.
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## 15. Regulatory Information

<b>US federal regulations</b>	This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.
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CERCLA/SARA Hazardous Substances - Not applicable.

### CERCLA (Superfund) reportable quantity

None

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

<b>Hazard categories</b>	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
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**Section 302 extremely hazardous substance** No

**Section 311 hazardous chemical** No

## Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of New and Existing Chemicals (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

## 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

### Further information

HMIS® is a registered trade and service mark of the NPCA.

### HMIS® ratings

Health: 1  
Flammability: 0  
Physical hazard: 0

### NFPA ratings

Health: 1  
Flammability: 0  
Instability: 0

### Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

### Issue date

24-Jun-2009

### This data sheet contains changes from the previous version in section(s):

This document has undergone significant changes and should be reviewed in its entirety.