

## 1 - Product and Company Information

ProductName LITHIUM PERIODATE DIHYDRATE

## 2 - Hazards Identification

### SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT

May cause harm to the unborn child. Contact with combustible material may cause fire.

## 3 - Composition/Information on Ingredients

Product Name	CAS #	EC no	Annex I
LITHIUM PERIODATE DIHYDRATE	None	None	None

Formula LiIO<sub>4</sub>.2H<sub>2</sub>O  
Molecular Weight 233.87 AMU

## 4 - First Aid Measures

### AFTER INHALATION

If inhaled, removal to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

### AFTER INGESTION

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

## 5 - Fire Fighting Measures

### CONDITIONS OF FLAMMABILITY

May accelerate combustion.

### EXTINGUISHING MEDIA

Suitable: Noncombustible. Use extinguishing media appropriate to surrounding fire conditions.

### SPECIAL RISKS

Specific Hazard(s): Emits toxic fumes under fire conditions. May accelerate combustion. Contact with other material may cause fire.

### SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

## 6 - Accidental Release Measures

### PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area.

### PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

### METHODS FOR CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

## 7 - Handling and Storage

### HANDLING

Directions for Safe Handling: Avoid breathing dust. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

### STORAGE

Conditions of Storage: Keep tightly closed. Store in a cool dry place.  
Unsuitable: Do not store near, nor allow contact with, clothing and other combustible material.

## 8 - Exposure Controls / Personal Protection

### ENGINEERING CONTROLS

Use only in a chemical fume hood. Safety shower and eye bath.

### GENERAL HYGIENE MEASURES

Wash contaminated clothing before reuse. Wash thoroughly after handling.

### PERSONAL PROTECTIVE EQUIPMENT

Special Protective Measures: Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.

## 9 - Physical and Chemical Properties

pH N/A  
BP/BP Range N/A  
MP/MP Range 370 °C  
Flash Point N/A  
Flammability N/A  
Autoignition Temp N/A  
Oxidizing Properties N/A  
Explosive Properties N/A  
Explosion Limits N/A  
Vapor Pressure N/A  
Partition Coefficient N/A  
Viscosity N/A  
Vapor Density N/A  
Saturated Vapor Conc. N/A

Evaporation Rate N/A  
Bulk Density N/A  
Decomposition Temp. N/A  
Solvent Content N/A  
Water Content N/A  
Surface Tension N/A  
Conductivity N/A  
Miscellaneous Data N/A  
Solubility N/A

## 10 - Stability and Reactivity

### STABILITY

Stable: Stable.  
Materials to Avoid: Organic materials, Finely powdered metals.

### HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Hydrogen iodide, Lithium oxides.

### HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

## 11 - Toxicological Information

### SENSITIZATION

Sensitization: Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

### SIGNS AND SYMPTOMS OF EXPOSURE

Large doses of lithium ion have caused dizziness and prostration, and can cause kidney damage if sodium intake is limited. Dehydration, weight loss, dermatological effects, and thyroid disturbances have been reported. Central nervous system effects that include slurred speech, blurred vision, sensory loss, ataxia, and convulsions may occur. Diarrhea, vomiting, and neuromuscular effects such as tremor, clonus, and hyperactive reflexes may occur as a result of repeated exposure to lithium ion. Prolonged exposure to iodides may produce iodism in sensitive individuals. Symptoms of exposure include: skin rash, running nose, headache and irritation of the mucous membrane. For severe cases the skin may show pimples, boils, hives, blisters and black and blue spots. Iodides are readily diffused across the placenta. Neonatal deaths from respiratory distress secondary to goiter have been reported. Iodides have been known to cause drug-induced fevers, which are usually of short duration. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

### ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation.  
Eye Contact: May cause eye irritation.  
Inhalation: Material may be irritating to mucous membranes and upper respiratory tract.  
Multiple Routes: Harmful if swallowed, inhaled, or absorbed through skin.

### TARGET ORGAN INFORMATION

Thyroid.

### CHRONIC EXPOSURE - TERATOGEN

Result: May cause congenital malformation in the fetus.

## 12 - Ecological Information

No data available.

## 13 - Disposal Considerations

### SUBSTANCE DISPOSAL

For small quantities: cautiously add to a large stirred excess of water. Adjust the pH to neutral, separate any insoluble solids or liquids and package them for hazardous-waste disposal. Flush the aqueous solution down the drain with plenty of water. The hydrolysis and neutralization reactions may generate heat and fumes which can be controlled by the rate of addition. Observe all federal, state, and local environmental regulations.

## 14 - Transport Information

### RID/ADR

UN#: 1479  
Class: 5.1  
PG: II  
Proper Shipping Name: Oxidizing solid, n.o.s.

### IMDG

UN#: 1479  
Class: 5.1  
PG: II  
Proper Shipping Name: Oxidizing solid, n.o.s.  
Marine Pollutant: No  
Severe Marine Pollutant: No  
Technical Name: Required

### IATA

UN#: 1479  
Class: 5.1  
PG: II  
Proper Shipping Name: Oxidizing solid, n.o.s.  
Inhalation Packing Group I: No  
Technical Name: Required

## 15 - Regulatory Information

### CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES

#### INDICATION OF DANGER: O-T

Oxidizing, Toxic.

R-PHRASES: 61-8

May cause harm to the unborn child. Contact with combustible material may cause fire.

S-PHRASES: 53-17-22-36/37/39-45

Avoid exposure - obtain special instructions before use. Keep away from combustible material. Do not breathe dust. Wear suitable protective clothing, gloves, and eye/face protection.

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Caution: Substance not yet fully tested (EU).

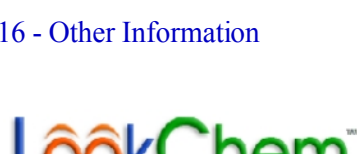
### COUNTRY SPECIFIC INFORMATION

#### Germany

WGK: 3

Self-Classification

## 16 - Other Information



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For R&D use only. Not for drug, household or other uses.

### WARRANTY:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Lookchem shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.