



# SAFETY DATA SHEET

**MATERION**

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Identification of the substance/preparation** Lithium Peroxide (Li2O2)  
**Version No.** 01  
**Issue date** 04-May-2015  
**CAS #** 12031-80-0  
**SDS Number** L-MSDS0004  
**Manufacturer information** Materion Advanced Chemicals Inc.  
407 N. 13th Street  
1316 W. St. Paul Avenue  
Milwaukee, WI 53233  
  
United States  
advancedmaterials@materion.com  
414.212.0257

## 2. HAZARDS IDENTIFICATION

**Classification** O;R7  
**Physical hazards** May cause fire.  
**Health hazards** Not classified as a health hazard.  
**Environmental hazards** Not classified as an environmental hazard.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS #	Percent	EC-No.	Classification
Lithium Peroxide	12031-80-0	100	234-758-0	O;R7

## 4. FIRST-AID MEASURES

## 5. FIRE-FIGHTING MEASURES

## 6. ACCIDENTAL RELEASE MEASURES

## 7. HANDLING AND STORAGE

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Occupational exposure limits** No exposure limits noted for ingredient(s).  
**Biological limit values** No biological exposure limits noted for the ingredient(s).  
**Recommended monitoring procedures**  
**Additional exposure data** Not available.  
**Personal protective equipment**  
**Skin and body protection** Not available.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance**  
**Physical state** Solid.  
**Form** Not available.  
**Colour** Not available.  
**Odour** Not applicable.  
**Odour threshold** Not available.  
**pH** Not available.  
**Boiling point** Not available.  
**Flash point** Not available.  
**Flammability limits in air, upper, % by volume** Not available.

<b>Flammability limits in air, lower, % by volume</b>	Not available.
<b>Vapour pressure</b>	< 0,0000001 kPa at 25 °C
<b>Relative density</b>	Not available.
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Vapour density</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Melting point/freezing point</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>VOC</b>	Not available.
<b>Molecular weight</b>	45,88 g/mol
<b>Molecular formula</b>	Li2-O2
<b>Other data</b>	
<b>Density</b>	2,14 g/cm3
<b>Specific gravity</b>	2,14

## 10. STABILITY AND REACTIVITY

<b>Conditions to avoid</b>	Not available.
<b>Hazardous decomposition products</b>	Not available.

## 11. TOXICOLOGICAL INFORMATION

## 12. ECOLOGICAL INFORMATION

## 13. DISPOSAL CONSIDERATIONS

## 14. TRANSPORT INFORMATION

### ADR

<b>UN number</b>	1472
<b>UN proper shipping name</b>	LITHIUM PEROXIDE
<b>Transport hazard class(es)</b>	
<b>Class</b>	5.1
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	5.1
<b>Hazard No.(ADR)</b>	50
<b>Tunnel restriction code</b>	E
<b>Packing group</b>	II
<b>Environmental hazards</b>	No.
<b>Special precautions for user</b>	Not available.

### IATA

<b>UN number</b>	1472
<b>UN proper shipping name</b>	Lithium peroxide
<b>Transport hazard class(es)</b>	
<b>Class</b>	5.1
<b>Subsidiary risk</b>	-
<b>Packing group</b>	II
<b>Environmental hazards</b>	No.
<b>ERG Code</b>	5L
<b>Special precautions for user</b>	Not available.
<b>Other information</b>	
<b>Passenger and cargo aircraft</b>	Allowed.
<b>Cargo aircraft only</b>	Allowed.

## IMDG

**UN number** 1472  
**UN proper shipping name** LITHIUM PEROXIDE  
**Transport hazard class(es)**  
**Class** 5.1  
**Subsidiary risk** -  
**Packing group** II  
**Environmental hazards**  
**Marine pollutant** No.  
**EmS** F-G, S-Q  
**Special precautions for user** Not available.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not available.

**ADR; IATA; IMDG**



## 15. REGULATORY INFORMATION

### Labeling

**Contains** Lithium Peroxide  
**EC number** 234-758-0  
**Symbol(s)**



Oxidising

**R-phrase(s)** R7 May cause fire.  
**S-phrase(s)** S60 This material and its container must be disposed of as hazardous waste.

## 16. OTHER INFORMATION

**Wording of the R-phrases in sections 2 and 3** R7 May cause fire.