



# SAFETY DATA SHEET

**MATERION**

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

**Name of the substance** Lutetium Oxide (Lu<sub>2</sub>O<sub>3</sub>)  
**Identification number** 234-764-3 (EC number)  
**Synonyms** None.  
**Document number** 1MX  
**Materion Code** 1MX  
**Issue date** 16-May-2015  
**Version number** 03  
**Revision date** 11-January-2018  
**Supersedes date** 21-January-2016

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Identified uses** Not available.  
**Uses advised against** None known.

### 1.3. Details of the supplier of the safety data sheet

#### Supplier

**Company name** Materion Advanced Chemicals Inc.  
**Address** 407 N. 13th Street  
1316 W. St. Paul Avenue  
Milwaukee, WI 53233  
United States  
**Division** Milwaukee  
**Telephone** 414.212.0257  
**e-mail** advancedmaterials@materion.com  
**Contact person** Noreen Atkinson

### 1.4. Emergency telephone number

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008 as amended

**Hazard summary** Not available.

### 2.2. Label elements

#### Label according to Regulation (EC) No. 1272/2008 as amended

**Contains:** Lutetium Oxide  
**Hazard pictograms** None.  
**Signal word** None.  
**Hazard statements** The substance does not meet the criteria for classification.

#### Precautionary statements

**Prevention** Not available.  
**Response** Not available.  
**Storage** Not available.  
**Disposal** Not available.

**Supplemental label information** None.

**2.3. Other hazards** None known.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

## General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Lutetium Oxide	90 - 100	12032-20-1 234-764-3	-	-	
<b>Classification:</b>	-				

## SECTION 4: First aid measures

**General information** Not available.

### 4.1. Description of first aid measures

**Inhalation** Not available.

**Skin contact** Not available.

**Eye contact** Not available.

**Ingestion** Not available.

**4.2. Most important symptoms and effects, both acute and delayed** Not available.

**4.3. Indication of any immediate medical attention and special treatment needed** Not available.

## SECTION 5: Firefighting measures

**General fire hazards** Not available.

### 5.1. Extinguishing media

**Suitable extinguishing media** Not available.

**Unsuitable extinguishing media** Not available.

**5.2. Special hazards arising from the substance or mixture** Not available.

### 5.3. Advice for firefighters

**Special protective equipment for firefighters** Not available.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** Not available.

**For emergency responders** Not available.

**6.2. Environmental precautions** Not available.

**6.3. Methods and material for containment and cleaning up** Not available.

**6.4. Reference to other sections** Not available.

## SECTION 7: Handling and storage

**7.1. Precautions for safe handling** Not available.

**7.2. Conditions for safe storage, including any incompatibilities** Not available.

**7.3. Specific end use(s)** Not available.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

**Occupational exposure limits** No exposure limits noted for ingredient(s).

**Biological limit values** No biological exposure limits noted for the ingredient(s).

<b>Recommended monitoring procedures</b>	Not available.
<b>Derived no effect levels (DNELs)</b>	Not available.
<b>Predicted no effect concentrations (PNECs)</b>	Not available.

## 8.2. Exposure controls

<b>Appropriate engineering controls</b>	Not available.
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### Individual protection measures, such as personal protective equipment

<b>General information</b>	Not available.
<b>Eye/face protection</b>	Not available.
<b>Skin protection</b>	
- Hand protection	Not available.
- Other	Not available.
<b>Respiratory protection</b>	Not available.
<b>Thermal hazards</b>	Not available.
<b>Hygiene measures</b>	Not available.
<b>Environmental exposure controls</b>	Not available.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

#### Appearance

<b>Physical state</b>	Solid.
<b>Form</b>	Not available.
<b>Colour</b>	Not available.

**Odour** Not available.

**Odour threshold** Not available.

**pH** Not available.

**Melting point/freezing point** Not available.

**Initial boiling point and boiling range** Not available.

**Flash point** Not available.

**Evaporation rate** Not available.

**Flammability (solid, gas)** Not available.

#### Upper/lower flammability or explosive limits

**Flammability limit - lower (%)** Not available.

**Flammability limit - upper (%)** Not available.

**Vapour pressure** Not available.

**Vapour density** Not available.

**Relative density** Not available.

#### Solubility(ies)

**Solubility (water)** Not available.

**Partition coefficient (n-octanol/water)** Not available.

**Auto-ignition temperature** Not available.

**Decomposition temperature** Not available.

**Viscosity** Not available.

**Explosive properties** Not available.

**Oxidising properties** Not available.

### 9.2. Other information

**Molecular formula** Lu<sub>2</sub>O<sub>3</sub>

## SECTION 10: Stability and reactivity

10.1. Reactivity	Not available.
10.2. Chemical stability	Not available.
10.3. Possibility of hazardous reactions	Not available.
10.4. Conditions to avoid	Not available.
10.5. Incompatible materials	Not available.
10.6. Hazardous decomposition products	Not available.

## SECTION 11: Toxicological information

General information Not available.

### Information on likely routes of exposure

Inhalation Not available.

Skin contact Not available.

Eye contact Not available.

Ingestion Not available.

Symptoms Not available.

### 11.1. Information on toxicological effects

Acute toxicity No data available.

Skin corrosion/irritation Not available.

Serious eye damage/eye irritation Not available.

Respiratory sensitisation Not available.

Skin sensitisation Not available.

Germ cell mutagenicity Not available.

### Carcinogenicity

Hungary. 26/2000 EüM Ordinance on protection against and preventing risk relating to exposure to carcinogens at work (as amended)

Not listed.

Reproductive toxicity Not available.

Specific target organ toxicity - single exposure Not available.

Specific target organ toxicity - repeated exposure Not available.

Aspiration hazard Not available.

Mixture versus substance information Not available.

Other information Not available.

## SECTION 12: Ecological information

12.1. Toxicity No toxicity data noted for the ingredient(s).

12.2. Persistence and degradability Not available.

12.3. Bioaccumulative potential Not available.

Partition coefficient n-octanol/water (log Kow) Not available.

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil Not available.

12.5. Results of PBT and vPvB assessment Not a PBT or vPvB substance or mixture.

12.6. Other adverse effects Not available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Residual waste** Not available.  
**Contaminated packaging** Not available.  
**EU waste code** Not available.

## **SECTION 14: Transport information**

### **ADR**

14.1. - 14.6.: Not regulated as dangerous goods.

### **RID**

14.1. - 14.6.: Not regulated as dangerous goods.

### **ADN**

14.1. - 14.6.: Not regulated as dangerous goods.

### **IATA**

14.1. - 14.6.: Not regulated as dangerous goods.

### **IMDG**

14.1. - 14.6.: Not regulated as dangerous goods.

## **SECTION 15: Regulatory information**

### **15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

#### **EU regulations**

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended**

Not listed.

**Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended**

Not listed.

**Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA**

Not listed.

#### **Authorisations**

**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended**

Not listed.

#### **Restrictions on use**

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended**

Not listed.

**Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.**

Not listed.

#### **Other EU regulations**

**Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended**

Not listed.

**National regulations** Not available.

**15.2. Chemical safety assessment** Not available.

## **SECTION 16: Other information**

**List of abbreviations** Not available.

**Information on evaluation  
method leading to the  
classification of mixture**

Not available.