

# Otto Chemie Pvt Ltd

Tel : + 91 22 2207 00 99 fax : 00 91 22 220 77777  
Email : info@ottokemi.com , Web : [www.ottokemi.com](http://www.ottokemi.com)

## MATERIAL DATA SAFETY SHEET

**Lutetium(iii) oxide, 99.99%**

### Product Identifier

**Product Code** L 1668

**Product Description:** Lutetium (III) oxide

**Synonyms** Lutetium oxide

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

Recommended Use Laboratory chemicals

Uses advised against No Information available

## 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture

#### REGULATION (EC) No 1272/2008

Not hazardous

Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R phrases mentioned in this Section, see Section 16

**R -phrase(s)** none

### Label Elements

**Signal Word** None

### Hazard Statements

#### Other Hazards

No information available.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Component** Lutetium oxide (Lu<sub>2</sub>O<sub>3</sub>)

12032-20-1

**EC No.** EEC No. 234-

764-3

**Weight %** 100

**CAS-No** 12032-20-1

### Classification

#### GHSCLAS

#### REACH Reg. No.

For the full text of the R phrases mentioned in this Section, see Section 16

## 4. FIRST AID MEASURES

Description of first aid measures

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes Obtain medical attention

**Skin Contact** Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes Obtain medical attention

**Ingestion** Do not induce vomiting Never give anything by mouth to an unconscious person Drink plenty of water Clean mouth with water Get medical attention If possible drink milk afterwards

**Inhalation** Remove from exposure, lie down Move to fresh air If breathing is difficult, give oxygen If not breathing, give artificial respiration Obtain medical attention

**Notes to Physician** Treat symptomatically

## 5. FIRE-FIGHTING MEASURES

### Extinguishing media

#### Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment Substance is nonflammable;

use agent most appropriate to extinguish surrounding fire.

#### Extinguishing media which must not be used for safety reasons

No information available.

#### Special hazards arising from the substance or mixture

Non-combustible

#### Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective

gear Thermal decomposition can lead to release of irritating gases and vapors

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

#### Environmental precautions

Prevent further leakage or spillage if safe to do so

#### Methods and material for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal.

## 7. HANDLING AND STORAGE

### Precautions for Safe Handling

Avoid contact with skin and eyes Do not breathe dust Do not breathe vapors or spray mist Avoid contact with clothing Remove and

wash contaminated clothing before re-use Do not ingest Wash thoroughly after handling

#### Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place Keep container tightly closed Keep under nitrogen

#### Specific End Uses

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Control parameters

**Exposure limits** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Derived No Effect Level (DNEL)** No information available.

**Predicted No Effect Concentration**

**(PNEC)** No information available.

#### Exposure controls

**Engineering Measures** Ensure adequate ventilation, especially in confined areas Ventilation systems

#### Personal protective equipment

**Eye Protection** Safety glasses with side-shields Goggles

**Hand Protection** Protective gloves

**Skin and body protection** Wear appropriate protective gloves and clothing to prevent skin exposure

**Respiratory Protection** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN

149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits

are exceeded or if irritation or other symptoms are experienced Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice

**Environmental exposure controls** No information available.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Physical State

Powder, Solid

### Appearance

White

### odor

odorless

### pH

No information available.

<b>Vapor Pressure</b>	No information available.
<b>Vapor Density</b>	No information available.
<b>Boiling Point/Range</b>	No information available
<b>Melting Point/Range</b>	No information available
<b>Flash Point</b>	No information available.
<b>Water Solubility</b>	Insoluble
<b>Specific Gravity</b>	9.420
<b>Molecular Formula</b>	Lu <sub>2</sub> O <sub>3</sub>
<b>Molecular Weight</b>	397.94

## 10. STABILITY AND REACTIVITY

<b>Reactivity</b>	
<b>Chemical Stability</b>	Stable under normal conditions. Hygroscopic.
<b>Possibility of Hazardous Reactions</b>	
<b>Hazardous Polymerization</b>	No information available
<b>Hazardous Reactions</b>	No information available
<b>Conditions to Avoid</b>	Incompatible products, Exposure to moisture
<b>Incompatible Materials</b>	Oxidizing agents, Strong oxidizing agents, Carbon dioxide (CO <sub>2</sub> )
<b>Hazardous Decomposition Products</b>	Thermal decomposition can lead to release of irritating gases and vapors. Carbon monoxide (CO). Carbon dioxide (CO <sub>2</sub> )

## 11. TOXICOLOGICAL INFORMATION

### Information on Toxicological Effects

#### Acute Toxicity

**Product Information** No acute toxicity information is available for this product

#### Component Information

#### Chronic Toxicity

**Carcinogenicity** There are no known carcinogenic chemicals in this product

## 11. TOXICOLOGICAL INFORMATION

<b>Sensitization</b>	No information available
<b>Mutagenic Effects</b>	No information available
<b>Reproductive Effects</b>	No information available
<b>Developmental Effects</b>	No information available.
<b>Target Organs</b>	No information available
<b>Endocrine Disruptor Information</b>	None known

## 12. ECOLOGICAL INFORMATION

### Toxicity

**Ecotoxicity effects** Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants

**Persistence and degradability** No information available

**Bioaccumulative potential** No information available.

**Mobility in soil** No information available.

### Results of PBT and vPvB assessment

**Other adverse effects** No information available

## 13. DISPOSAL CONSIDERATIONS

### Waste Disposal

Comply with Federal, State, and local regulation. If approved, remove to land disposal area.

## 14. TRANSPORT INFORMATION

IMDG/IMO	Not regulated
ADR	Not regulated
IATA	Not regulated

## 15. REGULATORY INFORMATION

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

#### International Inventories

Component EINECS ELINCS NLP TSCA DSL NDSL PICCS ENCS CHINA AICS KECL

Lutetium oxide (Lu<sub>2</sub>O<sub>3</sub>) 234-764-3 - X X - - X - X KE-22646 X

#### Legend

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**EINECS/ELINCS** - European Inventory Lists

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**CHINA** - China Inventory of Existing Chemical Substances

**AICS** - Inventory of Chemical Substances

**KECL** - Existing and Evaluated Chemical Substances

Chemical Safety Assessment

## 16. OTHER INFORMATION

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

OSHA: Occupational Safety & Health