

# Europium Oxide Eu<sub>2</sub>O<sub>3</sub> Nanopowder

**US Research Nanomaterials, Inc.**

**[www.us-nano.com](http://www.us-nano.com)**

## SAFTY DATA SHEET

Revised Date 11/6/2020

### 1. PRODUCT AND COMPANY IDENTIFICATION

#### 1.1 Product identifiers

Product name: Europium Oxide Eu<sub>2</sub>O<sub>3</sub> Nanopowder  
Product Number : US3543  
CAS#: 1308-96-9

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

Identified uses : Research

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

Company: [US Research Nanomaterials, Inc.](http://www.us-nano.com)  
3302 Twig Leaf Lane  
Houston, TX 77084  
USA  
Telephone: +1 832-460-3661  
Fax: +1 281-492-8628

#### 1.4 Emergency telephone number

Emergency Phone # : (832) 359-7887

### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

Not a hazardous substance or mixture.

#### 2.2 GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.

#### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

Europium Oxide Eu<sub>2</sub>O<sub>3</sub> CAS#: 7440-47-3

### 4. FIRST AID MEASURES

#### 4.1 Description of first aid measures

##### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous

area.

**If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**

no data available

**5. FIREFIGHTING MEASURES**

**5.1 Extinguishing media**

**Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**

Europium/europium oxides

**5.3 Advice for firefighters**

Wear self contained breathing apparatus for firefighting if necessary.

**5.4 Further information**

no data available

**6. ACCIDENTAL RELEASE MEASURES**

**6.1 Personal precautions, protective equipment and emergency procedures**

Avoid dust formation. Avoid breathing vapors, mist or gas. For personal protection see section 8.

**6.2 Environmental precautions**

No special environmental precautions required.

**6.3 Methods and materials for containment and cleaning up**

Sweep up and shovel. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**

For disposal see section 13.

**7. HANDLING AND STORAGE**

**7.1 Precautions for safe handling**

Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.

Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

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

Keep container tightly closed in a dry and well-ventilated place. hygroscopic Keep in a dry place. Storage class (TRGS 510): 13: Non Combustible Solids

## **7.3 Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

# **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

## **8.1 Control parameters**

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

## **8.2 Exposure controls**

### **Appropriate engineering controls**

General industrial hygiene practice.

### **Personal protective equipment**

#### **Eye/face protection**

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### **Skin protection**

For any handling steps where the substance is in particulate form or in a suspension with pure water where the substance is not solubilized, the gloves must be comprised of material that successfully passes ASTM F-1671. For any handling steps where the substance is part of a carrier liquid, other than the aqueous suspension noted in the previous paragraph, gloves must be comprised of material that successfully passes ASTM F-739 (continuous liquid contact method). Gloves must be changed before they show degradation and before the designated breakthrough time for the carrier liquid (as determined by the ASTM F-739 testing or by the manufacturer). Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### **Body Protection**

Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### **Respiratory protection**

The EPA mandates the use of full face respirators with minimum N100 grade cartridges if there is any risk of exposure to the dust. For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### **Control of environmental exposure**

Do not let product enter drains.

# **9. PHYSICAL AND CHEMICAL PROPERTIES**

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

- a) Appearance: powder
- b) Odor: No data available
- c) Odor Threshold: No data available
- d) pH: no data available
- e) Melting point/freezing point: No data available
- f) Initial boiling point and boiling range: No data available

- g) Flash point: No information available
- h) Evaporation rate: no data available
- i) OSHA Flammability Class: no data available
- j) Upper/lower flammability or explosive limits: no data available
- k) Vapor pressure: no data available
- l) Vapor density (air = 1): no data available
- m) Relative density (water = 1): 7.42 g/mL at 25 °C (77 °F)
- n) Water solubility: No data available
- o) Partition coefficient - noctanol/water: no data available
- p) Auto-ignition temperature: no data available
- q) Decomposition temperature: no data available
- r) Viscosity: no data available
- s) Explosive properties: no data available

## **9.2 Other safety information**

no data available

## **10. STABILITY AND REACTIVITY**

### **10.1 Reactivity**

No data available

### **10.2 Chemical stability**

Stable under recommended storage conditions.

### **10.3 Possibility of hazardous reactions**

No data available

### **10.4 Conditions to avoid**

No data available

### **10.5 Incompatible materials**

Strong acids, Strong oxidizing agents

### **10.6 Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Europium/europium oxides Other decomposition products - No data available In the event of fire: see section 5

## **11. TOXICOLOGICAL INFORMATION**

### **11.1 Information on toxicological effects**

#### **Acute toxicity**

No information available

#### **Skin corrosion/irritation**

No information available

#### **Serious eye damage/eye irritation**

No information available

#### **Respiratory or skin sensitization**

No information available

#### **Germ cell mutagenicity**

no data available

#### **Carcinogenicity**

Not listed

**Reproductive toxicity**

no data available

**Specific target organ toxicity - single exposure**

no data available

**Specific target organ toxicity - repeated exposure**

no data available

**Aspiration hazard**

Product may be an aspiration hazard

**Additional Information**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**12. ECOLOGICAL INFORMATION****12.1 Ecotoxicity**

Freshwater Fish: No information available

**12.2 Persistence and degradability**

No information available

**12.3 Bioaccumulative potential**

No information available

**12.4 Mobility in soil**

no data available

**12.5 Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**

Do not allow product to enter surface waters, wastewater or soil.

**13. DISPOSAL CONSIDERATIONS****13.1 Waste treatment methods****Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging****14. TRANSPORT INFORMATION****US DOT Information**

None

**IMDG Information**

None

**IATA Information**

None

**15. REGULATORY INFORMATION**

**SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

Acute Health Hazard

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**16. OTHER INFORMATION****Further information**

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.

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.