

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

### 1.1. Product identifier

**Product name:** CERIUM (IV) OXIDE

**CAS number:** 1306-38-3

**EINECS number:** \* 215-150-4

**Synonyms:** CERIUM DIOXIDE

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

**Use of substance / mixture:** PC21: Laboratory chemicals. PROC15: Use as laboratory reagent

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

**Company name:** Elemental Microanalysis Ltd  
1 Hameldown Road Okehampton  
Okehampton  
Devon  
EX20 1UB  
United Kingdom

**Tel:** 44(0)183754446

**Fax:** 44(0)183754544

**Email:** [info@microanalysis.co.uk](mailto:info@microanalysis.co.uk)

### 1.4. Emergency telephone number

**Emergency tel:** +44 (0) 7990 767375  
(office hours only)

## Section 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Classification under CLP:** \* This product has no classification under CLP.

### 2.2. Label elements

**Label elements:** \* This product has no label elements.

### 2.3. Other hazards

**PBT:** This product is not identified as a PBT/vPvB substance.

## Section 3: Composition/information on ingredients

### 3.1. Substances

**Chemical identity:** CERIUM (IV) OXIDE

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EINECS number: \* 215-150-4

## Section 4: First aid measures

### 4.1. Description of first aid measures

**Skin contact:** \* Wash immediately with plenty of soap and water.

**Eye contact:** Bathe the eye with running water for 15 minutes.

**Ingestion:** \* Wash out mouth with water.

**Inhalation:** \* Consult a doctor.

### 4.2. Most important symptoms and effects, both acute and delayed

**Skin contact:** \* There may be mild irritation at the site of contact.

**Eye contact:** \* There may be irritation and redness.

**Ingestion:** \* There may be irritation of the throat.

**Inhalation:** \* No symptoms.

**Delayed / immediate effects:** \*

### 4.3. Indication of any immediate medical attention and special treatment needed

**Immediate / special treatment:** Eye bathing equipment should be available on the premises.

## Section 5: Fire-fighting measures

### 5.1. Extinguishing media

**Extinguishing media:** Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

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

**Exposure hazards:** In combustion emits toxic fumes.

### 5.3. Advice for fire-fighters

**Advice for fire-fighters:** Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

## Section 6: Accidental release measures

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

**Personal precautions:** \* Refer to section 8 of SDS for personal protection details. Turn leaking containers leak-side up to prevent the escape of liquid.

### 6.2. Environmental precautions

**Environmental precautions:** Do not discharge into drains or rivers. Contain the spillage using bunding.

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

**Clean-up procedures:** \* Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

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## 6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

## Section 7: Handling and storage

### 7.1. Precautions for safe handling

Handling requirements: \*

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

Storage conditions: \* Store in a cool, well ventilated area. Keep container tightly closed.

### 7.3. Specific end use(s)

Specific end use(s): No data available.

## Section 8: Exposure controls/personal protection

### 8.1. Control parameters

Workplace exposure limits: No data available.

### DNEL/PNEC Values

DNEL / PNEC No data available.

### 8.2. Exposure controls

Respiratory protection: \* Respiratory protection not required.

Hand protection: \* Protective gloves.

Eye protection: Safety glasses. Ensure eye bath is to hand.

Skin protection: Protective clothing.

## Section 9: Physical and chemical properties

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

State: Granules

Colour: \* Pale yellow

Odour: Odourless

Evaporation rate: No data available.

Oxidising: No data available.

Solubility in water: Insoluble

Viscosity: Not applicable.

Boiling point/range°C: No data available.

Flammability limits %: lower: No data available.

Flash point°C: No data available.

Autoflammability°C: No data available.

Relative density: 7.13g/cm<sup>3</sup> at 25oc

VOC g/l: No data available.

Melting point/range°C: 2600

upper: No data available.

Part.coeff. n-octanol/water: No data available.

Vapour pressure: No data available.

pH: No data available.

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## 9.2. Other information

**Other information:** No data available.

## Section 10: Stability and reactivity

### 10.1. Reactivity

**Reactivity:** Stable under recommended transport or storage conditions.

### 10.2. Chemical stability

**Chemical stability:** Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

**Hazardous reactions:** Hazardous reactions will not occur under normal transport or storage conditions.  
Decomposition may occur on exposure to conditions or materials listed below.

### 10.4. Conditions to avoid

**Conditions to avoid:** Heat.

### 10.5. Incompatible materials

**Materials to avoid:** \* Strong oxidising agents. Strong acids.

### 10.6. Hazardous decomposition products

**Haz. decomp. products:** In combustion emits toxic fumes.

## Section 11: Toxicological information

### 11.1. Information on toxicological effects

#### Toxicity values:

Route	Species	Test	Value	Units
ORAL	RAT	LD50	>5000	mg/kg
INHALATION	RAT	4H LC50	>5.05	mg/l
DERMAL	RAT	LD50	>2000	mg/kg

### Symptoms / routes of exposure

**Skin contact:** \* There may be mild irritation at the site of contact.

**Eye contact:** \* There may be irritation and redness.

**Ingestion:** \* There may be irritation of the throat.

**Inhalation:** \* No symptoms.

**Delayed / immediate effects:** \*

## Section 12: Ecological information

### 12.1. Toxicity

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## \* Ecotoxicity values:

Species	Test	Value	Units
ZEBRAFISH (Brachydanio rerio)	96H LC50	>100	mg/l
Daphnia magna	48H EC50	>100	mg/l

## 12.2. Persistence and degradability

**Persistence and degradability:** Biodegradable.

## 12.3. Bioaccumulative potential

**Bioaccumulative potential:** No bioaccumulation potential.

## 12.4. Mobility in soil

**Mobility:** No data available.

## 12.5. Results of PBT and vPvB assessment

**PBT identification:** This product is not identified as a PBT/vPvB substance.

## 12.6. Other adverse effects

**Other adverse effects:** Negligible ecotoxicity.

## Section 13: Disposal considerations

### 13.1. Waste treatment methods

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

## Section 14: Transport information

**Transport class:** This product does not require a classification for transport.

## Section 15: Regulatory information

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

**Specific regulations:** Not applicable.

### 15.2. Chemical Safety Assessment

**Chemical safety assessment:** A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

## Section 16: Other information

### Other information

**Other information:** according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

\* indicates text in the SDS which has changed since the last revision.

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

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