SAFETY DATA SHEET

Version: v1 Revision Date: 2024-06-25 Print Date: 2024-06-27

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

1.1 Product identifiers

| Product name | : Cerium oxide |
|----------------|----------------|
| Product Number | : C103980 |
| Brand | : aladdin |
| CAS-No. | : 1306-38-3 |

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

| Identified uses : Labora | atory chemicals,Manufacture of substances. |
|--------------------------|--|
|--------------------------|--|

1.3 Company

| Company | : ALADDIN SCIENTIFIC CORPORATION |
|----------------------|----------------------------------|
| Address | : 14078 Meridian Parkway, |
| Riverside, CA. 92518 | |
| Telephone | : +1 (833) 552-7181 |
| Fax | : no data available |
| | |

1.4 Emergency telephone number

| CHEMTREC®, Inside the USA | : 1-800-424-9300 |
|----------------------------|------------------|
| CHEMTREC®, Outside the USA | : |

SECTION 2: Hazards identification

| 2.1 | Classification of the subst | ance or mixture |
|-----|----------------------------------|-------------------------------|
| | GHS Classification in accordance | e with 29 CFR 1910 (OSHA HCS) |
| 2.2 | GHS Label elements, inclu | ding precautionary statements |
| | Pictogram | |

Signal word Hazard statement(s) Precautionary statement(s)



2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

SECTION 3: Composition/information on ingredients



3.1 Substances

| : Ceric oxide Ceric oxide, ceria |
|----------------------------------|
| : CeO2 |
| : 172.11 |
| : 1306-38-3 |
| : 215-150-4 |
| |

| Component | Classification | Concentration |
|--------------|-------------------|--------------------------------|
| Cerium oxide | | |
| | no data available | 99.9% metals basis , yellow |

SECTION 4: First aid measures

4.1 Description of first aid measures

| General advice |
|---|
| no data available |
| If inhaled |
| no data available |
| In case of skin contact |
| Rinse with soap and plenty of water. Consult a doctor. |
| In case of eye contact |
| In case of eye contact, rinse thoroughly with plenty of water for at least 15 minutes and consult a doctor. |
| If swallowed |
| Rinse your mouth with water and then drink a large amount of water If symptoms appear, seek medical treatment |

4.2 Most important symptoms and effects, both acute and delayed

no data available

4.3 Indication of any immediate medical attention and special treatment needed

no data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Water,Foam,Carbon dioxide (CO2),Dry powder Unsuitable extinguishing media no data available

5.2 Special hazards arising from the substance or mixture

no data available

5.3 Advice for firefighters



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If necessary, wear a self-contained breathing apparatus to put out the fire.

5.4 Further information

no data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

It is recommended that emergency responders wear air-carrying respirators, anti-static clothing, and rubber oilresistant gloves. Do not touch or step over spillage. All equipment used during work should be grounded. Cut off sources of leaks as much as possible. Eliminate all ignition sources. The warning area is delineated according to the influence area of liquid flow, vapor or dust diffusion, and unrelated personnel are evacuated to the safe area from the crosswind and upwind directions.

6.2 Environmental precautions

Do not allow the product to enter the sewer.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

No data available

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool place. Keep the container tightly closed and store in a dry and ventilated place.

7.3 Specific end use(s)

no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Personal protective equipment

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> Eye/face protection no data available Skin protection 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. The selected protective gloves have to satisfy the specifications of Regulation (EU)2016/425 and the standard EN 374 derived from it. **Body Protection** no data available Respiratory protection Where risk assessment shows air-purifying respirators are appropriate use a fullface particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN(EU). Control of environmental exposure no data available

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| a) Appearance | no data available |
|--|---|
| b) Odour | no data available |
| c) Odour Threshold | no data available |
| d) pH | no data available |
| e) Melting point/freezing point | > 400 °C (> 752 °F) - OECD Test Guideline 102 |
| f) Initial boiling point and boiling range | > 400 °C (> 752 °F) - OECD Test Guideline 103 |
| g) Flash point | no data available |
| h) Evaporation rate | no data available |
| i) Flammability (solid, gas) | no data available |
| j) Upper/lower flammability or | |
| explosive limits | no data available |
| k) Vapour pressure | no data available |
| l) Vapour density | no data available |
| m) Relative density | 7.13 g/mL at 25 °C (77 °F) |
| n) Water solubility | no data available |
| o) Partition coefficient: n-octanol/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 N | no data available |
| t) Oxidizing properties N | no data available |
| | |

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9.2 Other safety information

no data available

SECTION 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 oxidant

10.6 Hazardous decomposition products

no data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity no data available Skin corrosion/irritation no data available Serious eye damage/eye irritation May cause eye irritation. Respiratory or skin sensitisation no data available Germ cell mutagenicity Cell Mutability - In vitro Test - Ames Test - Salmonella typhimurium with or without metabolic activation - Negative Cell Mutability - In vivo Test - Mice - Male and Female - Oral - Negative Carcinogenicity There are no components in this product at levels greater than or equal to 0.1% that have been identified by IARC as possible or definite human carcinogens. Reproductive toxicity no data available Specific target organ toxicity - single exposure

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> no data available Specific target organ toxicity - repeated exposure no data available Aspiration hazard no data available Additional Information no data available

SECTION 12: Ecological information

12.1 Toxicity

Semi-static test EC50 for fish - Danio rerio (zebrafish) - > 200 mg/l - Fixed EC50 for water fleas and other aquatic invertebrates at 72 h - Large Fleas (Water fleas) - > 1,000 mg/l - 48 h Method: OECD Test Guideline 202

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

No data available

SECTION 13:

13.1 Disposal considerations

Product no data available Contaminated packaging Dispose of as unused product.

SECTION 14: Transport information

| DOT (US) | | |
|-------------------------------------|----------------------------------|------------------------------|
| UN number: no data available | Packing group: - | Class: - |
| Proper shipping name: Not dangerous | Reportable Quantity(RQ): no data | Poison Inhalation Hazard: No |
| goods | available | |

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| Packing group: - | EMS-No: No |
|------------------|-------------------------------|
| ous goods | |
| | |
| Packing group: - | Class: - |
| ous goods | |
| | ous goods Packing group: - |

SECTION 15: Regulatory information

no data available

SECTION 16: Other information

| Prepared By | Regulatory Affairs ALADDIN SCIENTIFIC CORPORATION Email: QualityAssurance@aladdinsci.com |
|------------------|--|
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