

## Safety Data Sheet

### 1. Chemical product and company identification

Product name : Cerium(III) oxalate nonahydrate

#### Company information

Name of manufacturer : KANTO CHEMICAL CO., INC.  
 Address : 2-1, Nihonbashi, Muromachi 2-Chome, Chuo-Ku, Tokyo, 103-0022, JP  
 Name of section : Business Administration Department, Reagent Division  
 Telephone number : +81-3-6214-1090  
 Facsimile number : +81-3-3241-1047  
 Mail address : BC32@kanto.co.jp  
 Reference No : 07180

### 2. Hazards identification

Not applicable

### 3. Composition/information on ingredients

Distinction of substance or mixture : Substance

Chemical name	Concentration (%)	Formula	TSCA	EC-No.	CAS RN
Cerium(III) oxalate nonahydrate	≥ 98	Ce <sub>2</sub> (C <sub>2</sub> O <sub>4</sub> ) <sub>3</sub> · 9H <sub>2</sub> O	Listed	205-362-5	139-42-4

### 4. First aid measures

#### First aid measures

First-aid measures after inhalation : Remove the victim to fresh air, and make him blow his nose and gargle.  
 First-aid measures after skin contact : Wash the affected areas under running water.  
 First-aid measures after eye contact : Wash the affected areas under running water.  
 First-aid measures after ingestion : Give the victim water or salt water and make him vomit. Get medical attention.  
 Personal Protection in First Aid and Measures : Rescuers should wear proper protective equipment like rubber gloves, goggles.

### 5. Fire fighting measures

Suitable extinguishing media : Dry chemical powder, carbon dioxide, dry sand, foam  
 Unsuitable extinguishing media : Water spray  
 Firefighting instructions : Move containers from fire area if it can be done without risk, if not possible, apply water from a safe distance to cool and protect surrounding area.  
 Dry chemical powder, carbon dioxide or dry sand should be used for small fires. Foam extinguisher is effective for a large scale fire.  
 Personal protection (Emergency response) : Firefighters should wear protective equipment.



## 6. Accidental release measures

### Personal Precautions, Protective Equipment and Emergency Procedures

General measures : Wear proper protective equipment and avoid contact with skin and inhalation of dust. Conduct operations from upwind and evacuate people downwind.

### Environmental precautions

Environmental precautions : Attention should be given to avoid damage to the environment by flowing of spillage to rivers.

### Methods and Equipment for Containment and Cleaning up

For containment : Sweep up in a chemical waste container. Flush contaminated area with copious amounts of water.

## 7. Handling and storage

### Handling

Technical measures : Wear appropriate protective equipment to avoid contact with skin or inhalation of dust.

Precautions for safe handling : Avoid formation of dust and aerosols.

### Storage

Storage conditions : Store in a dark, cool place and tightly closed.

Material used in packaging/containers : Glass, polyethylene, polypropylene.

## 8. Exposure controls / Personal protection equipment

ACGIH TWA	Not established
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Appropriate engineering controls : Install a local ventilation system in case of dusty condition.

### Protective equipment

Respiratory protection : If necessary, wear dust mask

Hand protection : Impervious protective gloves

Eye protection : Safety goggles

Skin and body protection : Protective clothing, protective boots

## 9. Physical and chemical properties

Physical state : Solid

Color : White

Odor : Odorless

pH : No data available

Melting point : No data available

Freezing point : No data available

Boiling point : No data available

Flash point : No data available

Auto-ignition temperature : No data available

Decomposition temperature : 110 ° C (Lose 8 molecules of water of crystallization)

Flammability (solid, gas) : Flammable solid



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Vapor pressure	: No data available
Relative density	: No data available
Density	: No data available
Relative gas density	: No data available
Solubility	: Water: Practically insoluble
Partition coefficient n-octanol/water (log Pow)	: No data available
Explosive limits (vol %)	: No data available
Viscosity, kinematic	: No data available
Particle characteristics	: No data available

## 10. Stability and reactivity

Reactivity	: May react with oxidizing substances.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Stable under normal conditions of use.
Conditions to avoid	: Light, heat.
Incompatible materials	: Oxidizing substances.
Hazardous decomposition products	: Carbon monoxide, cerium oxides.

## 11. Toxicological information

Acute toxicity (oral)	: Classification not possible
Acute toxicity (dermal)	: Classification not possible
Acute toxicity (inhalation)	: No classification (gas) No classification (vapor) Classification not possible (dust, mist)
Skin corrosion/irritation	: Classification not possible
Serious eye damage/irritation	: Classification not possible
Respiratory sensitization	: Classification not possible
Skin sensitization	: Classification not possible
Germ cell mutagenicity	: Classification not possible
Carcinogenicity	: Classification not possible
Reproductive toxicity	: Classification not possible
STOT-single exposure	: Classification not possible Besides, cerium is classified into category 1 (blood). Cerium : The anticoagulant effects of the substance were evaluated following a single dose to 18 patients. The toxic reactions of hemoglobinemia, and hemoglobinuria were reported and the substance was classified into category 1 (blood).
STOT-repeated exposure	: Classification not possible Although there are numerous case reports of workers developing interstitial lung disease or pneumoconiosis after occupational exposure to cerium compounds (including cerium oxide) and other rare earth elements, it can not be determined whether the effects were caused by cerium itself.
Aspiration hazard	: Classification not possible

## 12. Ecological information

### Ecotoxicity

Aquatic acute	: Classification not possible
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Aquatic chronic : Classification not possible

#### **Persistence and degradability**

No additional information available

#### **Bioaccumulative potential**

No additional information available

#### **Mobility in soil**

No additional information available

#### **Hazardous to the ozone layer**

Ozone : Classification not possible

### **13. Disposal considerations**

Ecology - waste materials : Mixed with flammable organic solvents and burn in a chemical incinerator equipped with an afterburner and a scrubber. Or entrust approved waste disposal companies with the disposal.

Contaminated container and packaging : In case of disposal of empty bottles, dispose bottles after removing the content thoroughly.

### **14. Transport information**

#### **International Regulations**

##### **Transport by sea(IMDG)**

UN-No. (IMDG) : Not applicable  
 Proper Shipping Name (IMDG) : Not applicable  
 Packing group (IMDG) : Not applicable  
 Transport hazard class(es) (IMDG) : Not applicable

##### **Air transport(IATA)**

UN-No. (IATA) : Not applicable  
 Proper Shipping Name (IATA) : Not applicable  
 Packing group (IATA) : Not applicable  
 Transport hazard class(es) (IATA) : Not applicable

Marine pollutant : Not applicable

### **15. Regulatory information**

Regulatory information with regard to this substance in your country or region should be examined by your own responsibility.

### **16. Other information**

Data sources : Encyclopaedia Chimica, Kyoritsu Shuppan Co, Ltd. (1963) .  
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 NITE Chemical Risk Information Platform (NITE-CHRIP), National Institute of Technology and Evaluation.

The information contained herein is based on several references and the present state of our knowledge. However the SDS does not always cover all information about the product, handle the product carefully. The information is intended to ordinary usage, in case of particular handlings, conduct appropriate safety measurements. The information herein is only provision of information, and



it does not represent a guarantee the properties of the product. The Safety Data Sheet(SDS) is prepared based on JIS Z7253.

