

Revision: 14.02.2014

Printing date 14.02.2014

Version number 1

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

#### 1.1 Product identifier

Trade name: Cerium (III) oxalate hydrate ROTI®REMETIC 99.95%

Article number: 7067

CAS Number: 15750-47-7 EC number: 205-362-5

**Index number:** 607-007-00-3

#### Registration number

A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

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

No further relevant information available.

## Application of the substance / the mixture

Laboratory chemical

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

# Manufacturer/Supplier:

Carl Roth GmbH + Co.KG Schoemperlenstraße 3-5 76185 Karlsruhe Germany

Telefon: +49/(0)721 5606-0 Telefax: +49/(0)721 5606-149 e-mail: sicherheit@carlroth.de

Further information obtainable from: Department Health, Safety and Environment

# 1.4 Emergency telephone number:

Poison Centre Munich Telefon +49/(0)89 19240

# 2 Hazards identification

#### 2.1 Classification of the substance or mixture

# Classification according to Regulation (EC) No 1272/2008

Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H312 Harmful in contact with skin.

# Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Xn; Harmful

R21/22: Harmful in contact with skin and if swallowed.

### 2.2 Label elements

#### Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

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# Hazard pictograms



#### Signal word Warning

#### **Hazard statements**

H302+H312 Harmful if swallowed or in contact with skin.

#### **Precautionary statements**

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

#### Additional information:

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#### 2.3 Other hazards

All chemicals are potentially dangerous. They are therefore only be handled by specially trained personnel with the necessary care.

#### Results of PBT and vPvB assessment

**PBT:** Not applicable. **vPvB:** Not applicable.

## 3 Composition/information on ingredients

### 3.1 Chemical characterization: Substances

### **CAS No. Description**

15750-47-7 Cerium (III) oxalate hydrate

Identification number(s) EC number: 205-362-5 Index Number: 607-007-00-3 Formula: C<sub>6</sub>Ce<sub>2</sub>O<sub>12</sub> x X H<sub>2</sub>O Molar mass [g/mol]: 544,29

#### 4 First aid measures



#### 4.1 Description of first aid measures

### General information:

Remove any clothing soiled by the product.

#### After inhalation:

Supply fresh air; if there is any trouble seek medical help.

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#### After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

#### After eye contact:

Rinse opened eye for 10 minutes under running water. Then consult a doctor.

#### After swallowing:

Rinse out mouth and drink a glass of water. Do not induce vomiting.

Call for a doctor immediately.

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

The following applies to oxalates in general: nausea and vomiting after swallowing. Mucosal irritations, coughing, and dyspnoea after inhalation. Systemic effect: drop in the blood calcium level, toxic effect on kidneys, cardiovascular disorders.

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

No further relevant information available.

# 5 Firefighting measures

# 5.1 Extinguishing media

### Suitable extinguishing agents:

Use fire extinguishing methods suitable to surrounding conditions.

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

#### For safety reasons unsuitable extinguishing agents:

For this substance/mixture no limitations of extinguishing agents are given.

## 5.2 Special hazards arising from the substance or mixture

In the event of fire development of hazardous combustion gases or vapours possible.

In case of fire, the following can be released:

Carbon monoxide and carbon dioxide

#### 5.3 Advice for firefighters

#### **Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

# 6 Accidental release measures

# 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Avoid formation of dust.

Wear personal protective equipment.

Evacuate the danger area, observe emergency procedures, consult an expert.

#### **6.2 Environmental precautions**

Do not allow to enter sewers/ground water or penetrate the soil.

# 6.3 Methods and material for containment and cleaning up

Pick up mechanically.

Dispose of the material collected according to regulations.

Dispose contaminated material as waste according to item 13.

#### 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

# 7 Handling and storage

#### 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of dust.

Keep containers, equipment and working place clean.

Handling corresponding to laboratory safety guidelines.

## Information about fire - and explosion protection:

No special measures required.

# 7.2 Conditions for safe storage, including any incompatibilities

#### Storage:

# Requirements to be met by storerooms and receptacles:

No special requirements.

## Information about storage in one common storage facility:

Store away from foodstuffs.

# Further information about storage conditions:

Store in dry conditions.

Recommended storage temperature: 15 - 25 °C

#### 7.3 Specific end use(s)

No further relevant information available.

#### 8 Exposure controls/personal protection

# Additional information about design of technical facilities:

No further data; see item 7.

## 8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace: Not required.

#### Additional information:

The lists valid during the making were used as basis.

#### 8.2 Exposure controls

#### Personal protective equipment:

#### General protective and hygienic measures:

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Do not breathe dust.

#### Individual protection measures

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

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#### Respiratory protection:



Particle filter required when dusts are generated.

Filter P3 (colour code: white)

#### Protection of hands:



#### Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

#### **Material of gloves**

Nitrile, thickness: ≥ 0.11 mm

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

# Penetration time of glove material

Value for the permeation: Level ≥ 6

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

# As protection from splashes gloves made of the following materials are suitable:

Nitrile rubber, thickness:  $\geq 0.11$  mm Value for the permeation: Level  $\geq 6$ 

#### **Eye protection:**



Tightly sealed goggles

#### **Body protection:**

Protective work clothing

# 9 Physical and chemical properties

# 9.1 Information on basic physical and chemical properties

**General Information** 

Appearance:

Form: Solid
Colour: White
Odour: Odourless

Odour threshold: No information available.

**pH-value:** No information available.

Change in condition

**Melting point/Melting range:** No information available.

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Boiling point/Boiling range:	No information available.	
Flash point:	No information available	
Flammability (solid, gaseous):	No information available	
Ignition temperature:	No information available	
Decomposition temperature:	No information available	
Self-igniting:	No information available	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	No information available.	
Upper:	No information available.	
Oxidizing properties:	No information available.	
Vapour pressure:	No information available	
Density:		
Relative density	No Information available.	
Vapour density	No information available	
Evaporation rate	No information available	
Solubility in / Miscibility with		
water:	No information available.	
Partition coefficient (n-octanol/wat	ter): No information available	
Viscosity:		
Dynamic:	No information available.	
Kinematic:	No information available.	
9.2 Other information	No further relevant information available.	

# 10 Stability and reactivity

#### 10.1 Reactivity

See section 10.3

# 10.2 Chemical stability

# Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

# 10.3 Possibility of hazardous reactions

Exothermic reaction with:

Strong oxidants

# 10.4 Conditions to avoid

Strong Heating. (decomposition)

# 10.5 Incompatible materials:

No information available.

# 10.6 Hazardous decomposition products:

In case of fire: see item 5.

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# 11 Toxicological information

# 11.1 Information on toxicological effects

### **Acute toxicity:**

#### LD/LC50 values relevant for classification:

Quantitative data on the toxicity of this product are not available.

#### Specific symptoms in biological assay:

No information available.

#### **Primary irritant effect:**

#### on the skin:

No information available.

#### on the eye:

No information available.

#### after inhalation:

No information available.

#### Sensitization:

No sensitizing effects known.

#### CMR effects:

#### Germ cell mutagenicity:

No information available.

#### Carcinogenicity:

No information available.

#### Reproductive toxicity:

No information available.

#### **Aspiration hazard:**

Not applicable.

# Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

## Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

#### Additional toxicological information:

The following applies to oxalates in general: nausea and vomiting after swallowing. Mucosal irritations, coughing, and dyspnoea after inhalation. Systemic effect: drop in the blood calcium level, toxic effect on kidneys, cardiovascular disorders.

## Further information:

The product should be handled with the care usual when dealing with chemicals.

# 12 Ecological information

# 12.1 Toxicity

# Aquatic toxicity:

Quantitative data on the ecological effect of this product are not available.

## 12.2 Persistence and degradability

No further relevant information available.

### 12.3 Bioaccumulative potential

No further relevant information available.

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# 12.4 Mobility in soil

No further relevant information available.

#### **Ecotoxical effects:**

#### Remark:

Do not allow to enter waters, waste water, or soil!

#### 12.5 Results of PBT and vPvB assessment

**PBT:** Not applicable. **vPvB:** Not applicable.

# 12.6 Other adverse effects

No further relevant information available.

# 13 Disposal considerations

#### Waste treatment methods

#### Recommendation

This material and its container must be disposed of as hazardous waste.

The disposal is regionally differently regulated, therefore the kind of disposal is to be inquired at the responsible authorities.

#### Uncleaned packaging:

#### Recommendation:

Disposal according to official regulations.

Void	
Void	
Void	
Void	
No	
Not applicable.	
nex II of Not applicable.	
-	
	Void  Void  Void  No Not applicable.

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# 15 Regulatory information

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

National regulations:

Information about limitation of use: Employment restrictions concerning juveniles must be observed.

**Breakdown regulations:** 

Waterhazard class:

Water hazard class 3 (Self-assessment): extremely hazardous for water.

#### 15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

# 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing MSDS: Department: Health, Safety and Environment

Contact: Herr Dr. Hagel

#### Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

LD50\*: Lethal Dose, 50 percent (Not relevant for classification)

LD50\*: Lethal Concentration, 50 percent (Not relevant for classification)

Acute Tox. 4: Acute toxicity, Hazard Category 4

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