

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Ammonium cerium(IV) sulfate dihydrate for analysis, ACS, Reag. Ph. Eur.

Revision date: 16.02.2024

Product code: 21406

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

##### 1.1. Product identifier

Ammonium cerium(IV) sulfate dihydrate for analysis, ACS, Reag. Ph. Eur.

CAS No: 10378-47-9

EC No: 231-567-4

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

###### Use of the substance/mixture

Laboratory chemicals

Industrial uses: Uses of substances as such or in preparations at industrial sites

Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

###### Uses advised against

Do not use for private purposes (household).

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

Company name: AnalytiChem GmbH

ACD

Street: Stempelstraße 6

Place: D-47167 Duisburg

Telephone: 0203/5194-0

Telefax: 0203/5194-290

E-mail: info@analytichem.de

Contact person: Abteilung Produktsicherheit

Telephone: 0203/5194-107/117

E-mail: produktsicherheit@analytichem.de

Internet: www.analytichem.de

Responsible Department: Abteilung Produktsicherheit

##### 1.4. Emergency telephone number:

For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

##### Further Information

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.

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

###### Regulation (EC) No 1272/2008

This substance is not classified as hazardous in accordance with Regulation (EC) No 1272/2008.

##### 2.2. Label elements

##### 2.3. Other hazards

No data available

#### SECTION 3: Composition/information on ingredients

##### 3.1. Substances

Sum formula:  $\text{CeH}_{16}\text{N}_4\text{O}_{16}\text{S}_4 \cdot 2\text{H}_2\text{O}$   $\text{CeH}_{16}\text{N}_4\text{O}_{16}\text{S}_4$

Molecular weight: 632,55 g/mol

##### Relevant ingredients

none (according to Regulation (EC) No 1907/2006 (REACH))

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#### Further Information

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

No data available

#### After inhalation

Provide fresh air.

#### After contact with skin

Wash immediately with: Water

Take off immediately all contaminated clothing and wash it before reuse.

#### After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.

#### After ingestion

Rinse mouth immediately and drink plenty of water.

Call a doctor if you feel unwell.

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

Irritant

Gastrointestinal complaints

Vomiting

Circulatory collapse

Spasms

Anaesthetic state

Respiratory complaints

### 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

Co-ordinate fire-fighting measures to the fire surroundings.

#### Unsuitable extinguishing media

no restriction

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

Non-combustible solids

Hazardous combustion products

In case of fire may be liberated:

Nitrogen oxides (NO<sub>x</sub>)

Sulphur oxides

### 5.3. Advice for firefighters

Do not inhale explosion and combustion gases.

Avoid contact with skin, eyes and clothes.

In case of fire: Wear self-contained breathing apparatus.

#### Additional information

Suppress gases/vapours/mists with water spray jet.

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Move undamaged containers from immediate hazard area if it can be done safely.

Use water spray jet to protect personnel and to cool endangered containers.

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## SECTION 6: Accidental release measures

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

#### For non-emergency personnel

- Provide adequate ventilation.
- Use personal protection equipment.
- Avoid contact with skin, eyes and clothes.
- Remove persons to safety.
- Emergency procedures
- Do not breathe dust/fume/gas/mist/vapours/spray.

#### For emergency responders

Precautionary statements For emergency responders : Personal protection equipment: see section 8

### 6.2. Environmental precautions

- Do not allow to enter into surface water or drains.

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

#### For containment

- Cover drains.
- Prevent spread over a wide area (e.g. by containment or oil barriers).
- Collect in closed and suitable containers for disposal.
- Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

#### For cleaning up

- Clean contaminated articles and floor according to the environmental legislation.

#### Other information

- Provide adequate ventilation.
- Do not breathe dust/fume/gas/mist/vapours/spray.
- Wear breathing apparatus if exposed to vapours/dusts/aerosols.

### 6.4. Reference to other sections

- Safe handling: see section 7
- Personal protection equipment: see section 8
- Disposal: see section 13

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Advice on safe handling

- Handle and open container with care. Keep container tightly closed.
- Provide adequate ventilation. Avoid dust formation. Do not breathe dust.
- Avoid contact with skin, eyes and clothes.

#### Advice on protection against fire and explosion

- Usual measures for fire prevention.

#### Advice on general occupational hygiene

- Wash contaminated clothing prior to re-use.
- Do not breathe vapour/aerosol. Avoid contact with skin, eyes and clothes.
- The type of personal protection equipment has to be chosen based on the concentration and amount of the dangerous substance at the workplace.

#### Further information on handling

- Wash contaminated clothing before reuse.
- Wash hands before breaks and after work.

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

#### Requirements for storage rooms and vessels

- Store in a well-ventilated place. Keep container tightly closed.

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storage temperature +15°C - +25°C.

#### Hints on joint storage

No data available

#### Further information on storage conditions

Store in a dry place.

Protect against: Light

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

Laboratory chemicals

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

#### 8.2. Exposure controls

##### Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

##### Individual protection measures, such as personal protective equipment

##### Eye/face protection

goggles

##### Hand protection

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: [vertrieb@kcl.de](mailto:vertrieb@kcl.de) With specification (test according to EN374):

By long-term hand contact

Trade name/designation KCL 741 Dermatril® L

Suitable material: NBR (Nitrile rubber) 0,11 mm

Wearing time with permanent contact: > 480 min

By short-term hand contact

Trade name/designation KCL 741 Dermatril® L

Suitable material: NBR (Nitrile rubber) 0,11 mm

Wearing time with occasional contact (splashes): > 480 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet (>, <) supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

##### Skin protection

Wear suitable protective clothing.

Take off immediately all contaminated clothing.

Wash hands before breaks and after work.

##### Respiratory protection

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Filtering device with filter or ventilator filtering device of type: P1

##### Environmental exposure controls

Do not allow to enter into surface water or drains.

### SECTION 9: Physical and chemical properties

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

Physical state:

solid

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Colour:	yellow	
Odour:	odourless	
Melting point/freezing point:		No data available
Boiling point or initial boiling point and boiling range:		No data available
Flammability:		No data available
Lower explosion limits:		No data available
Upper explosion limits:		No data available
Flash point:		No data available
Auto-ignition temperature:		No data available
Decomposition temperature:		No data available
pH-Value (at 20 °C):		1,2 (100 g/l)
Viscosity / kinematic:		No data available
Water solubility:		No data available
Solubility in other solvents		No data available
Partition coefficient n-octanol/water:		No data available
Vapour pressure:		No data available
Vapour pressure:		No data available
Density:		No data available
Bulk density:		800 kg/m <sup>3</sup>
Relative vapour density:		No data available

#### 9.2. Other information

##### Information with regard to physical hazard classes

Explosive properties	
No data available	
Sustaining combustion:	No data available
Self-ignition temperature	
Solid:	No data available
Gas:	No data available
Oxidizing properties	
No data available	

##### Other safety characteristics

Evaporation rate:	No data available
Solvent separation test:	No data available
Solvent content:	0
Solid content:	0
Sublimation point:	No data available
Softening point:	No data available
Pour point:	No data available
No data available:	
Viscosity / dynamic:	No data available
Flow time:	No data available

##### Further Information

No data available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No data available

### 10.2. Chemical stability

Protect against: Light

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

Strong acid  
Strong alkali

#### **10.4. Conditions to avoid**

Light

#### **10.5. Incompatible materials**

No data available

#### **10.6. Hazardous decomposition products**

In case of fire may be liberated:  
SECTION 5: Firefighting measures

#### **Further information**

No data available

### **SECTION 11: Toxicological information**

#### **11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

##### **Toxicokinetics, metabolism and distribution**

No data available

##### **Acute toxicity**

Based on available data, the classification criteria are not met.

##### **Irritation and corrosivity**

Based on available data, the classification criteria are not met.  
slightly irritant but not relevant for classification.

##### **Sensitising effects**

Based on available data, the classification criteria are not met.

##### **Carcinogenic/mutagenic/toxic effects for reproduction**

Based on available data, the classification criteria are not met.

##### **STOT-single exposure**

Based on available data, the classification criteria are not met.

##### **STOT-repeated exposure**

Based on available data, the classification criteria are not met.

##### **Aspiration hazard**

Based on available data, the classification criteria are not met.

##### **Information on likely routes of exposure**

No data available

##### **Specific effects in experiment on an animal**

No data available

##### **Additional information on tests**

No data available

##### **Practical experience**

No data available

#### **11.2. Information on other hazards**

##### **Endocrine disrupting properties**

No data available

##### **Other information**

No data available

#### **Further information**

Irritant  
Gastrointestinal complaints

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Vomiting  
Circulatory collapse  
Spasms  
Anaesthetic state  
Respiratory complaints

## SECTION 12: Ecological information

### 12.1. Toxicity

Based on available data, the classification criteria are not met.

### 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

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

### 12.6. Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to non-target organisms.

### 12.7. Other adverse effects

No data available

### Further information

Do not allow to enter into surface water or drains.  
Discharge into the environment must be avoided.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Disposal recommendations

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

#### Contaminated packaging

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

## SECTION 14: Transport information

### Land transport (ADR/RID)

<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

### Inland waterways transport (ADN)

<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

### Marine transport (IMDG)

<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

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#### Air transport (ICAO-TI/IATA-DGR)

<b>14.1. UN number or ID number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

#### 14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

#### 14.7. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of this transport regulation.

### SECTION 15: Regulatory information

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

##### National regulatory information

Water hazard class (D): 1 - slightly hazardous to water

##### Additional information

No data available

### SECTION 16: Other information

#### Changes

This data sheet contains changes from the previous version in section(s): 12.

#### Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.