



## Safety Data Sheet



### Ammonium cerium (IV) sulfate dihydrate

#### Section 1: Chemical Product and Company Identification

**Product Name:** Ammonium cerium (IV) sulfate dihydrate

**Contact Information:**

**Catalog Codes:**

**CAS#:** 10378-47-9

**Email:** [info@drm-chem.com](mailto:info@drm-chem.com)

**RTECS:** -

**Address:** #7, Afshar javan Alley, Sohrevardi St, Tehran, Iran

**TSCA:** -

**post code:** 1551818111

**Synonym:** Cerium (IV) ammonium sulfate

**Tehran Sales:** +98 21 88177760

**Chemical Name:** Ammonium cerium (IV) sulfate dihydrate

**Order Online:** [Drm-chem.com](http://Drm-chem.com)

**Chemical Formula:**  $(\text{NH}_4)_4 \text{Ce} (\text{SO}_4)_4 \cdot 2\text{H}_2\text{O}$

#### Section 2: Composition and Information on Ingredients

**Composition:**

| Name                                   | CAS #      | % by Weight |
|----------------------------------------|------------|-------------|
| Ammonium cerium (IV) sulfate dihydrate | 10378-47-9 | 100 %       |

**Toxicological Data on Ingredients:** -

#### Section 3: Hazards Identification

**Classification of the substance or mixture**

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008

**Label elements****Labelling according Regulation (EC) No 1272/2008**

No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required

**Other hazards**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**Section 4: First Aid Measures****Description of first-aid measures****If inhaled**

After inhalation: fresh air.

**In case of skin contact**

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

**In case of eye contact**

After eye contact: rinse out with plenty of water. Remove contact lenses.

**If swallowed**

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling

**Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 3.2) and/or in section 11

**Indication of any immediate medical attention and special treatment needed**

No data available

**Section 5: Fire and Explosion Data****Extinguishing media****Suitable extinguishing media**

Water Foam Carbon dioxide (CO<sub>2</sub>) Dry powder

**Unsuitable extinguishing media**

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

**Special hazards arising from the substance or mixture**

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

Sulfur oxides

cerium oxides

Combustible.

Development of hazardous combustion gases or vapours possible in the event of fire.

**Advice for firefighters**

In the event of fire, wear self-contained breathing apparatus.

**Further information**

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

**Section 6: Accidental Release Measures****Personal precautions, protective equipment and emergency procedures**

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

**Environmental precautions**

Do not let product enter drains.

**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.

**Reference to other sections**

For disposal see section 13.

**Section 7: Handling and Storage****Precautions for safe handling****Advice on protection against fire and explosion**

For precautions see section 3.2.

**Conditions for safe storage, including any incompatibilities****Storage conditions**

Tightly closed.dry

**Storage class**

Storage class (TRGS 510): 11: Combustible Solids

## Section 8: Exposure Controls/Personal Protection

### Control parameters

#### Ingredients with workplace control parameters

### Exposure controls

#### Personal protective equipment

#### Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles

#### 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.

#### Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

#### Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

### Respiratory protection

required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type P1

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

#### **Control of environmental exposure**

Do not let product enter drains.

### **Section 9: Physical and Chemical Properties**

|                                                     |                                    |
|-----------------------------------------------------|------------------------------------|
| <b>Physical state</b>                               | crystalline powder                 |
| <b>Color</b>                                        | Yellowish orange                   |
| <b>Odor</b>                                         | No data available                  |
| <b>pH</b>                                           | No data available                  |
| <b>Melting point/freezing point</b>                 | Melting point/range: 130 °C - lit. |
| <b>Initial boiling point and boiling range</b>      | No data available                  |
| <b>Flash point</b>                                  | Not applicable                     |
| <b>Evaporation rate</b>                             | No data available                  |
| <b>Flammability (solid, gas)</b>                    | No data available                  |
| <b>Upper/lower flammability or explosive limits</b> | No data available                  |
| <b>Vapor pressure</b>                               | No data available                  |
| <b>Density</b>                                      | No data available                  |
| <b>Relative density</b>                             | No data available                  |

|                                                   |                                                                                  |
|---------------------------------------------------|----------------------------------------------------------------------------------|
| <b>Water solubility</b>                           | No data available                                                                |
| <b>Partition coefficient:<br/>n-octanol/water</b> | No data available                                                                |
| <b>Autoignition<br/>Temperature</b>               | No data available                                                                |
| <b>Decomposition<br/>Temperature</b>              | No data available                                                                |
| <b>Viscosity</b>                                  | Viscosity, kinematic: No data available<br>Viscosity, dynamic: No data available |
| <b>Relative vapor density</b>                     | No data available                                                                |
| <b>Explosive properties</b>                       | No data available                                                                |
| <b>Oxidizing properties</b>                       | No data available                                                                |
| <b>Other safety information</b>                   |                                                                                  |
| <b>Bulk density</b>                               | No data available                                                                |
| <b>Particle size</b>                              | No data available                                                                |

## Section 10: Stability and Reactivity Data

### Reactivity

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

### Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

### Possibility of hazardous reactions

Violent reactions possible with:

Strong acids  
strong alkalis

### Conditions to avoid

no information available

### Incompatible materials

No data available

**Hazardous decomposition products**

In the event of fire: see section 5

**Section 11: Toxicological Information****Information on toxicological effects****Mixture****Acute toxicity**

Oral: No data available

Inhalation: No data available

Dermal: No data available

**Skin corrosion/irritation**

No data available

**Serious eye damage/eye irritation**

No data available

**Respiratory or skin sensitization**

No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

No data available

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

**Additional Information****Endocrine disrupting properties****Product:**

**Assessment:** The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article

57(f) or Commission Delegated regulation (EU)  
2017/2100 or Commission Regulation (EU)  
2018/605 at levels of 0.1% or higher.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

## Section 12: Ecological Information

### **Toxicity**

#### **Mixture**

No data available

### **Persistence and degradability**

No data available

### **Bioaccumulative potential**

No data available

### **Mobility in soil**

No data available

### **Results of PBT and vPvB assessment**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### **Endocrine disrupting properties**

#### **Product:**

**Assessment:** The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### **Other adverse effects**

No data available

## Section 13: Disposal Considerations

### **Waste treatment methods**

No data available

#### Section 14: Transport Information

**UN number**

ADR/RID: -

IMDG: -

IATA: -

**UN proper shipping name**

ADR/RID: Not dangerous goods)

IMDG: Not dangerous goods

IATA: Not dangerous goods

**Transport hazard class(es)**

ADR/RID: -

IMDG: -

IATA: -

**Packaging group**

ADR/RID: -

IMDG: -

IATA: -

**Environmental hazards**

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

**Special precautions for user**

No data available

**Further information**

Not classified as dangerous in the meaning of transport regulations.

#### Section 15: Other Regulatory Information

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

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

**Chemical safety assessment**

For this product a chemical safety assessment was not carried out

#### Section 16: Other Information

**References:** Not available

**Other Special Considerations:** Not available

**Created:** 02/2026

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the

Information for their particular purposes. In no event shall *Drm-chem.com* be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if *Drm-chem.com* has been advised of the possibility of such damages.