

# Safety Data Sheet

acc. to OSHA HCS

Printing date 06/10/2022

Reviewed on 06/10/2022

## 1 Identification

- **Product identifier**
- **Trade name:** URANIUM NITRATE, 1% AQUEOUS SOLUTION
- **Article number:** 26392-08, 26116-01
- **CAS Number:**  
7732-18-5
- **EC number:**  
231-791-2
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: [info@emsdiasum.com](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://www.emsdiasum.com)
- **Information department:** Product safety department
- **Emergency telephone number:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS06 Skull and crossbones

Acute Toxicity - Inhalation 3

H331 Toxic if inhaled.



GHS08 Health hazard

Specific Target Organ Toxicity - Repeated Exposure 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS07

Acute Toxicity - Oral 4

H302 Harmful if swallowed.

- **Label elements**
- **GHS label elements** The substance is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS06



GHS08

- **Signal word** Danger

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**Trade name: URANIUM NITRATE, 1% AQUEOUS SOLUTION**

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· **Hazard-determining components of labeling:**

Uranyl Nitrate, Hexahydrate, Reagent ACS  
22600

· **Hazard statements**

Harmful if swallowed.

Toxic if inhaled.

May cause damage to organs through prolonged or repeated exposure.

· **Precautionary statements**

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

If swallowed: Call a poison center/doctor if you feel unwell.

Rinse mouth.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a poison center/doctor.

Specific treatment (see on this label).

Get medical advice/attention if you feel unwell.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 3

Fire = 0

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 3

Fire = 0

Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

### 3 Composition/information on ingredients

· **Chemical characterization: Substances**

· **CAS No. Description**

7732-18-5 Deionized Water, Reagent Grade A.C.S.

· **Identification number(s)**

· **EC number:** 231-791-2

· **Dangerous components:**

|            |   |       |
|------------|---|-------|
| 13520-83-7 | Uranyl Nitrate, Hexahydrate, Reagent ACS<br>22600 | ≤2.5% |
|------------|---|-------|

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**Trade name: URANIUM NITRATE, 1% AQUEOUS SOLUTION**

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## 4 First-aid measures

- **Description of first aid measures**

- **General information:**

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

Remove breathing apparatus only after contaminated clothing have been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

- **After inhalation:**

Supply fresh air or oxygen; call for doctor.

In case of unconsciousness place patient stably in side position for transportation.

- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

- **After swallowing:** Immediately call a doctor.

- **Information for doctor:**

- **Most important symptoms and effects, both acute and delayed** No further relevant information available.

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

No further relevant information available.

## 5 Fire-fighting measures

- **Extinguishing media**

- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.

- **Special hazards arising from the substance or mixture** No further relevant information available.

- **Advice for firefighters**

- **Protective equipment:** Mouth respiratory protective device.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.

- **Environmental precautions:**

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

- **Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

- **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

- **Protective Action Criteria for Chemicals**

- **PAC-1:**

13520-83-7

Uranyl Nitrate, Hexahydrate, Reagent ACS  
22600

1.3 mg/m<sup>3</sup>

- **PAC-2:**

13520-83-7

Uranyl Nitrate, Hexahydrate, Reagent ACS  
22600

7 mg/m<sup>3</sup>

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**· PAC-3:**

|            |   |
|------------|---|
| 13520-83-7 | Uranyl Nitrate, Hexahydrate, Reagent ACS<br>22600 |
|------------|---|

42 mg/m<sup>3</sup>

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
*Ensure good ventilation/exhaustion at the workplace.  
 Open and handle receptacle with care.  
 Prevent formation of aerosols.*
- **Information about protection against explosions and fires:** *Keep respiratory protective device available.*
- **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:** *Not required.*
- **Further information about storage conditions:** *Keep receptacle tightly sealed.*
- **Specific end use(s)** *No further relevant information available.*

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** *No further data; see item 7.*
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:** *Not required.*
- **Additional information:** *The lists that were valid during the creation were used as basis.*
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
*Keep away from foodstuffs, beverages and feed.  
 Immediately remove all soiled and contaminated clothing.  
 Wash hands before breaks and at the end of work.  
 Store protective clothing separately.*
- **Breathing equipment:**  
*In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.*
- **Protection of hands:**  
*The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
 Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
 Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation*
- **Material of gloves**  
*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**  
*The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.*
- **Eye protection:** *Goggles recommended during refilling.*

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**Trade name: URANIUM NITRATE, 1% AQUEOUS SOLUTION**

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## 9 Physical and chemical properties

|  |                       |
|--|-----------------------|
| · <b>Information on basic physical and chemical properties</b>                 |                       |
| · <b>General Information</b>   |                       |
| · <b>Appearance:</b>   |                       |
| · <b>Form:</b>   | Fluid                 |
| · <b>Color:</b>  | Colorless             |
| · <b>Odor:</b>   | Characteristic        |
| · <b>Odor threshold:</b>   | Not determined.       |
| · <b>pH-value:</b> Not determined.   |                       |
| · <b>Change in condition</b>   |                       |
| · <b>Melting point/Melting range:</b>  | 0 °C (32 °F)          |
| · <b>Boiling point/Boiling range:</b>  | 100 °C (212 °F)       |
| · <b>Flash point:</b> Not applicable.  |                       |
| · <b>Flammability (solid, gaseous):</b> Not flammable.                         |                       |
| · <b>Decomposition temperature:</b> Not determined.                            |                       |
| · <b>Auto igniting:</b> Not determined.  |                       |
| · <b>Danger of explosion:</b> Product does not present an explosion hazard.    |                       |
| · <b>Explosion limits:</b>   |                       |
| · <b>Lower:</b>  | Not determined.       |
| · <b>Upper:</b>  | Not determined.       |
| · <b>Vapor pressure at 20 °C (68 °F):</b> 23 hPa (17.3 mm Hg)                  |                       |
| · <b>Density at 20 °C (68 °F):</b> 1.01807 g/cm <sup>3</sup> (8.49579 lbs/gal) |                       |
| · <b>Relative density</b> Not determined.                                      |                       |
| · <b>Vapor density</b> Not determined.   |                       |
| · <b>Evaporation rate</b> Not determined.                                      |                       |
| · <b>Solubility in / Miscibility with Water:</b> Fully miscible.               |                       |
| · <b>Partition coefficient (n-octanol/water):</b> Not determined.              |                       |
| · <b>Viscosity:</b>  |                       |
| · <b>Dynamic at 20 °C (68 °F):</b>   | 0.952 mPas            |
| · <b>Kinematic:</b>  | Not determined.       |
| · <b>Water:</b>  | 99.0 %                |
| · <b>VOC content:</b>  | 0.00 %                |
|  | 0.0 g/l / 0.00 lb/gal |
| · <b>Solids content:</b> 1.0 %   |                       |
| · <b>Other information</b> No further relevant information available.          |                       |

## 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.

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- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety Health Administration)**

None of the ingredients is listed.

## 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
- *Water hazard class 1 (Self-assessment): slightly hazardous for water*
- *Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.*
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
- *Must not be disposed of together with household garbage. Do not allow product to reach sewage system.*
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

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## 14 Transport information

|   |                 |
|---|-----------------|
| <b>· UN-Number</b>  |                 |
| <b>· DOT, ADR, IMDG, IATA</b>   | Void            |
| <b>· UN proper shipping name</b>  |                 |
| <b>· DOT, ADR, IMDG, IATA</b>   | Void            |
| <b>· Transport hazard class(es)</b>   |                 |
| <b>· DOT, ADR, ADN, IMDG, IATA</b>  |                 |
| <b>· Class</b>  | Void            |
| <b>· Packing group</b>  |                 |
| <b>· DOT, ADR, IMDG, IATA</b>   | Void            |
| <b>· Environmental hazards:</b>   | Not applicable. |
| <b>· Special precautions for user</b>   | Not applicable. |
| <b>· Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b> | Not applicable. |
| <b>· UN "Model Regulation":</b>   | Void            |

## 15 Regulatory information

|   |  |
|---|--|
| <b>· Safety, health and environmental regulations/legislation specific for the substance or mixture</b> |  |
| No further relevant information available.  |  |
| <b>· Sara</b>   |  |
| <b>· Section 355 (extremely hazardous substances):</b>  |  |
| None of the ingredients is listed.  |  |
| <b>· Section 313 (Specific toxic chemical listings):</b>  |  |
| None of the ingredients is listed.  |  |
| <b>· TSCA (Toxic Substances Control Act):</b>   |  |
| ACTIVE  |  |
| <b>· Hazardous Air Pollutants</b>   |  |
| None of the ingredients is listed.  |  |
| <b>· Proposition 65</b>   |  |
| <b>· Chemicals known to cause cancer:</b>   |  |
| None of the ingredients is listed.  |  |
| <b>· Chemicals known to cause reproductive toxicity for females:</b>                                    |  |
| None of the ingredients is listed.  |  |
| <b>· Chemicals known to cause reproductive toxicity for males:</b>                                      |  |
| None of the ingredients is listed.  |  |
| <b>· Chemicals known to cause developmental toxicity:</b>   |  |
| None of the ingredients is listed.  |  |
| <b>· Carcinogenic categories</b>  |  |
| <b>· EPA (Environmental Protection Agency)</b>  |  |
| None of the ingredients is listed.  |  |

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· **TLV (Threshold Limit Value)**

|            |   |    |
|------------|---|----|
| 13520-83-7 | Uranyl Nitrate, Hexahydrate, Reagent ACS<br>22600 | AI |
|------------|---|----|

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

|            |   |
|------------|---|
| 13520-83-7 | Uranyl Nitrate, Hexahydrate, Reagent ACS<br>22600 |
|------------|---|

· **GHS label elements** The substance is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS06 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**

Uranyl Nitrate, Hexahydrate, Reagent ACS  
22600

· **Hazard statements**

Harmful if swallowed.

Toxic if inhaled.

May cause damage to organs through prolonged or repeated exposure.

· **Precautionary statements**

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

If swallowed: Call a poison center/doctor if you feel unwell.

Rinse mouth.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a poison center/doctor.

Specific treatment (see on this label).

Get medical advice/attention if you feel unwell.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **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.

· **Contact:**

· **Date of preparation / last revision** 06/10/2022 / -

· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

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**Trade name: URANIUM NITRATE, 1% AQUEOUS SOLUTION**

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*VOC: Volatile Organic Compounds (USA, EU)**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**NIOSH: National Institute for Occupational Safety**OSHA: Occupational Safety **Health****TLV: Threshold Limit Value**PEL: Permissible Exposure Limit**REL: Recommended Exposure Limit**Acute Toxicity - Oral 4: Acute toxicity – Category 4**Acute Toxicity - Inhalation 3: Acute toxicity – Category 3**Specific Target Organ Toxicity - Repeated Exposure 2: Specific target organ toxicity (repeated exposure) – Category 2*

US

# Safety Data Sheet

## according to WHS Regulations

Printing date 10.06.2022

Revision: 10.06.2022

### 1 Identification

- **Product identifier**
- **Trade name:** URANIUM NITRATE, 1% AQUEOUS SOLUTION
- **Article number:** 26392-08, 26116-01
- **CAS Number:**  
7732-18-5
- **EC number:**  
231-791-2
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: [info@emsdiasum.com](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://www.emsdiasum.com)
- ProSciTech Pty Ltd  
11 Carlton Street, Kirwan QLD 4817 Australia  
Telephone Number: (07) 4773 9444 - 8:30am - 5:00pm, Monday to Friday (excluding Public Holidays)  
Emergency Contact: (07) 4773 9444 - 8:30am - 5:00pm, Monday to Friday (excluding Public Holidays)  
Website: [ems.proscitech.com](http://ems.proscitech.com)
- Emgrid Australia Pty. Ltd.  
P.O. Box 118  
The Patch VIC 3792  
Australia  
Tel: 03 9752 1785  
Fax: 03 9752 1784  
Website: [www.emgrid.com.au](http://www.emgrid.com.au)
- **Further information obtainable from:** Product safety department
- **Emergency telephone number:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### 2 Hazard(s) Identification

- **Classification of the substance or mixture**



GHS06 skull and crossbones

Acute Tox. 3 H331 Toxic if inhaled.



GHS08 health hazard

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

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**Trade name: URANIUM NITRATE, 1% AQUEOUS SOLUTION**

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GHS07

*Acute Tox. 4 H302 Harmful if swallowed.*

· **Label elements**

· **GHS label elements**

*The substance is classified and labelled according to the Globally Harmonised System (GHS).*

· **Hazard pictograms**



GHS06



GHS08

· **Signal word** *Danger*

· **Hazard-determining components of labelling:**

*Uranyl Nitrate, Hexahydrate, Reagent ACS  
22600*

· **Hazard statements**

*Harmful if swallowed.*

*Toxic if inhaled.*

*May cause damage to organs through prolonged or repeated exposure.*

· **Precautionary statements**

*Do not breathe dust/fume/gas/mist/vapours/spray.*

*Wash thoroughly after handling.*

*Do not eat, drink or smoke when using this product.*

*Use only outdoors or in a well-ventilated area.*

*IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.*

*Rinse mouth.*

*IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.*

*Call a POISON CENTER/doctor.*

*Specific treatment (see on this label).*

*Get medical advice/attention if you feel unwell.*

*Store locked up.*

*Dispose of contents/container in accordance with local/regional/national/international regulations.*

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** *Not applicable.*

· **vPvB:** *Not applicable.*

### 3 Composition and Information on Ingredients

· **Chemical characterisation: Substances**

· **CAS No. Description**

*7732-18-5 Deionized Water, Reagent Grade A.C.S.*

· **Identification number(s)**

· **EC number:** *231-791-2*

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**Trade name: URANIUM NITRATE, 1% AQUEOUS SOLUTION**

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**· Dangerous components:**

|            |   |       |
|------------|---|-------|
| 13520-83-7 | Uranyl Nitrate, Hexahydrate, Reagent ACS<br>22600 | ≤2.5% |
|------------|---|-------|

### 4 First Aid Measures

**· Description of first aid measures**

**· General information:**

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

Remove breathing equipment only after contaminated clothing have been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

**· After inhalation:**

Supply fresh air or oxygen; call for doctor.

In case of unconsciousness place patient stably in side position for transportation.

**· After skin contact:** Immediately wash with water and soap and rinse thoroughly.

**· After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

**· After swallowing:** Call for a doctor immediately.

**· Information for doctor:**

**· Most important symptoms and effects, both acute and delayed** No further relevant information available.

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

No further relevant information available.

### 5 Fire Fighting Measures

**· Extinguishing media**

**· Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.

**· Special hazards arising from the substance or mixture** No further relevant information available.

**· Advice for firefighters**

**· Protective equipment:** Mouth respiratory protective device.

### 6 Accidental Release Measures

**· Personal precautions, protective equipment and emergency procedures** Not required.

**· Environmental precautions:**

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

**· Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

**· Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

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## Safety Data Sheet according to WHS Regulations

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**Trade name: URANIUM NITRATE, 1% AQUEOUS SOLUTION**

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### 7 Handling and Storage

- **Handling:**
- **Precautions for safe handling**  
*Ensure good ventilation/exhaustion at the workplace.  
 Open and handle receptacle with care.  
 Prevent formation of aerosols.*
- **Information about fire - and explosion protection:** *Keep respiratory protective device available.*
- **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:** *Not required.*
- **Further information about storage conditions:** *Keep container tightly sealed.*
- **Specific end use(s)** *No further relevant information available.*

### 8 Exposure controls and personal protection

- **Additional information about design of technical facilities:** *No further data; see item 7.*
- **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.*
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
*Keep away from foodstuffs, beverages and feed.  
 Immediately remove all soiled and contaminated clothing  
 Wash hands before breaks and at the end of work.  
 Store protective clothing separately.*
- **Respiratory protection:**  
*In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.*
- **Protection of hands:**  
*The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
 Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
 Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation*
- **Material of gloves**  
*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**  
*The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.*
- **Eye protection:** *Goggles recommended during refilling*

AU

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# Safety Data Sheet

## according to WHS Regulations

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Revision: 10.06.2022

Trade name: URANIUM NITRATE, 1% AQUEOUS SOLUTION

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### 9 Physical and Chemical Properties

|  |   |
|--|---|
| · <b>Information on basic physical and chemical properties</b> |   |
| · <b>General Information</b>                                   |   |
| · <b>Appearance:</b>   |   |
| Form:  | Fluid   |
| Colour:  | Colourless                                    |
| · Odour:   | Characteristic                                |
| · Odour threshold:   | Not determined.                               |
| · pH-value:  | Not determined.                               |
| · <b>Change in condition</b>                                   |   |
| Melting point/freezing point:                                  | 0 °C  |
| Initial boiling point and boiling range:                       | 100 °C  |
| · Flash point:   | Not applicable.                               |
| · Flammability (solid, gas):                                   | Not applicable.                               |
| · Decomposition temperature:                                   | Not determined.                               |
| · Auto-ignition temperature:                                   | Not determined.                               |
| · Explosive properties:  | Product does not present an explosion hazard. |
| · <b>Explosion limits:</b>                                     |   |
| Lower:   | Not determined.                               |
| Upper:   | Not determined.                               |
| · Vapour pressure at 20 °C:                                    | 23 hPa  |
| · Density at 20 °C:  | 1.01807 g/cm <sup>3</sup>                     |
| · Relative density   | Not determined.                               |
| · Vapour density   | Not determined.                               |
| · Evaporation rate   | Not determined.                               |
| · <b>Solubility in / Miscibility with water:</b>               |   |
|  | Fully miscible.                               |
| · Partition coefficient: n-octanol/water:                      | Not determined.                               |
| · <b>Viscosity:</b>  |   |
| Dynamic at 20 °C:  | 0.952 mPas                                    |
| Kinematic:   | Not determined.                               |
| Water:   | 99.0 %  |
| VOC (EC)   | 0.00 %  |
| Solids content:  | 1.0 %   |
| · Other information  | No further relevant information available.    |

### 10 Stability and Reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.

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# Safety Data Sheet

## according to WHS Regulations

Printing date 10.06.2022

Revision: 10.06.2022

**Trade name: URANIUM NITRATE, 1% AQUEOUS SOLUTION**

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· **Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological Information

- **Information on toxicological effects**
- **Acute toxicity**
- **Primary irritant effect:**
- **Skin corrosion/irritation** No irritant effect.
- **Serious eye damage/irritation** No irritating effect.
- **Respiratory or skin sensitisation** No sensitising effects known.

### 12 Ecological Information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### 14 Transport information

- |  |               |
|--|---------------|
| <ul style="list-style-type: none"> <li>· <b>UN-Number</b></li> <li>· <b>ADG, IMDG, IATA</b></li> </ul>   | not regulated |
| <ul style="list-style-type: none"> <li>· <b>UN proper shipping name</b></li> <li>· <b>ADG, IMDG, IATA</b></li> </ul>                                 | not regulated |
| <ul style="list-style-type: none"> <li>· <b>Transport hazard class(es)</b></li> <li>· <b>ADG, ADN, IMDG, IATA</b></li> <li>· <b>Class</b></li> </ul> | not regulated |

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# Safety Data Sheet

## according to WHS Regulations

Printing date 10.06.2022

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**Trade name: URANIUM NITRATE, 1% AQUEOUS SOLUTION**

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|   |                        |
|---|------------------------|
| · <b>Packing group</b><br>· <b>ADG, IMDG, IATA</b>                          | <i>not regulated</i>   |
| · <b>Environmental hazards:</b>   | <i>Not applicable.</i> |
| · <b>Special precautions for user</b>                                       | <i>Not applicable.</i> |
| · <b>Transport in bulk according to Annex II of Marpol and the IBC Code</b> | <i>Not applicable.</i> |
| · <b>UN "Model Regulation":</b>   | <i>not regulated</i>   |

### 15 Regulatory information

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

· **Australian Inventory of Industrial Chemicals**

*All ingredients are listed.*

· **Standard for the Uniform Scheduling of Medicines and Poisons**

*None of the ingredients is listed.*

· **Australia: Priority Existing Chemicals**

*None of the ingredients is listed.*

· **GHS label elements**

*The substance is classified and labelled according to the Globally Harmonised System (GHS).*

· **Hazard pictograms**



GHS06 GHS08

· **Signal word** *Danger*

· **Hazard-determining components of labelling:**

*Uranyl Nitrate, Hexahydrate, Reagent ACS  
22600*

· **Hazard statements**

*Harmful if swallowed.*

*Toxic if inhaled.*

*May cause damage to organs through prolonged or repeated exposure.*

· **Precautionary statements**

*Do not breathe dust/fume/gas/mist/vapours/spray.*

*Wash thoroughly after handling.*

*Do not eat, drink or smoke when using this product.*

*Use only outdoors or in a well-ventilated area.*

*IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.*

*Rinse mouth.*

*IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.*

*Call a POISON CENTER/doctor.*

*Specific treatment (see on this label).*

*Get medical advice/attention if you feel unwell.*

*Store locked up.*

*Dispose of contents/container in accordance with local/regional/national/international regulations.*

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# Safety Data Sheet

## according to WHS Regulations

Printing date 10.06.2022

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**Trade name: URANIUM NITRATE, 1% AQUEOUS SOLUTION**

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- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I Substance is not listed.**
- **Seveso category H2 ACUTE TOXIC**
- **Qualifying quantity (tonnes) for the application of lower-tier requirements 50 t**
- **Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t**
- **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.*

- **Contact:**
- **Abbreviations and acronyms:**
  - ADR: Accord relatif au transport international 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*
  - EINECS: European Inventory of Existing Commercial Chemical Substances*
  - ELINCS: European List of Notified Chemical Substances*
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)*
  - VOC: Volatile Organic Compounds (USA, EU)*
  - PBT: Persistent, Bioaccumulative and Toxic*
  - vPvB: very Persistent and very Bioaccumulative*
  - Acute Tox. 4: Acute toxicity – Category 4*
  - Acute Tox. 3: Acute toxicity – Category 3*
  - STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2*

AU

# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 06/10/2022

Reviewed on 06/10/2022

### 1 Identification

- **Product identifier**
- **Trade name:** URANIUM NITRATE, 1% AQUEOUS SOLUTION
- **Article number:** 26392-08, 26116-01
- **CAS Number:**  
7732-18-5
- **EC number:**  
231-791-2
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: [info@emsdiasum.com](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://www.emsdiasum.com)
- **Information department:** Product safety department
- **Emergency telephone number:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### 2 Hazard identification

- **Classification of the substance or mixture**



GHS06 Skull and crossbones

Acute Toxicity (Inhalation) - Category 3

H331 Toxic if inhaled.



GHS08 Health hazard

Specific Target Organ Toxicity - Repeated Exposure -  
Category 2H373 May cause damage to organs through prolonged  
or repeated exposure.

GHS07

Acute Toxicity (Oral) - Category 4

H302 Harmful if swallowed.

- **Label elements**

- **GHS label elements** The substance is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS06



GHS08

- **Signal word** Danger

(Contd. on page 2)

# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 06/10/2022

Reviewed on 06/10/2022

**Trade name: URANIUM NITRATE, 1% AQUEOUS SOLUTION**

(Contd. of page 1)

· **Hazard-determining components of labeling:**

Uranyl Nitrate, Hexahydrate, Reagent ACS  
22600

· **Hazard statements**

Harmful if swallowed.

Toxic if inhaled.

May cause damage to organs through prolonged or repeated exposure.

· **Precautionary statements**

Do not breathe dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

If swallowed: Call a poison center/doctor if you feel unwell.

Rinse mouth.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a poison center/doctor.

Specific treatment (see on this label).

Get medical advice/attention if you feel unwell.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 3

Fire = 0

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 3

Fire = 0

Reactivity = 0

### 3 Composition/Information on ingredients

· **Chemical characterization: Substances**

· **CAS No. Description**

7732-18-5 Deionized Water, Reagent Grade A.C.S.

· **Identification number(s)**

· **EC number:** 231-791-2

· **Dangerous components:**

|            |   |              |
|------------|---|--------------|
| 13520-83-7 | Uranyl Nitrate, Hexahydrate, Reagent ACS<br>22600 | 0.1-1% w/w * |
|------------|---|--------------|

\* Actual concentration ranges are withheld as a trade secret.

### 4 First-aid measures

· **Description of first aid measures**

· **General information:**

Immediately remove any clothing soiled by the product.

(Contd. on page 3)

# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 06/10/2022

Reviewed on 06/10/2022

**Trade name: URANIUM NITRATE, 1% AQUEOUS SOLUTION**

(Contd. of page 2)

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

Remove breathing apparatus only after contaminated clothing have been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

· **After inhalation:**

Supply fresh air or oxygen; call for doctor.

In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

· **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

· **After swallowing:** Immediately call a doctor.

· **Information for doctor:**

· **Most important symptoms and effects, both acute and delayed** No further relevant information available.

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

No further relevant information available.

### 5 Fire-fighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.

· **Special hazards arising from the substance or mixture** No further relevant information available.

· **Advice for firefighters**

· **Protective equipment:** Mouth respiratory protective device.

### 6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures** Not required.

· **Environmental precautions:**

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

· **Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### 7 Handling and storage

· **Handling:**

· **Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

· **Information about protection against explosions and fires:** Keep respiratory protective device available.

· **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:** Not required.

· **Further information about storage conditions:** Keep receptacle tightly sealed.

(Contd. on page 4)

# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 06/10/2022

Reviewed on 06/10/2022

**Trade name: URANIUM NITRATE, 1% AQUEOUS SOLUTION**

(Contd. of page 3)

· **Specific end use(s)** No further relevant information available.

### 8 Exposure controls/ Personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
 Keep away from foodstuffs, beverages and feed.  
 Immediately remove all soiled and contaminated clothing.  
 Wash hands before breaks and at the end of work.  
 Store protective clothing separately.
- **Breathing equipment:**  
 In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **Protection of hands:**  
 The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
 Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
 Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**  
 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**  
 The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Goggles recommended during refilling.

### 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

|                        |                 |
|------------------------|-----------------|
| <b>Form:</b>           | Fluid           |
| <b>Color:</b>          | Colorless       |
| <b>Odor:</b>           | Characteristic  |
| <b>Odor threshold:</b> | Not determined. |
- **pH-value:** Not determined.
- **Change in condition**

|                                     |        |
|-------------------------------------|--------|
| <b>Melting point/Melting range:</b> | 0 °C   |
| <b>Boiling point/Boiling range:</b> | 100 °C |
- **Flash point:** Not applicable.
- **Flammability (solid, gaseous):** Not flammable.
- **Decomposition temperature:** Not determined.

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CA

# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 06/10/2022

Reviewed on 06/10/2022

**Trade name: URANIUM NITRATE, 1% AQUEOUS SOLUTION**

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|   |   |
|---|---|
| · <b>Auto igniting:</b>                           | Not determined.                               |
| · <b>Danger of explosion:</b>                     | Product does not present an explosion hazard. |
| · <b>Explosion limits:</b>                        |   |
| <b>Lower:</b>                                     | Not determined.                               |
| <b>Upper:</b>                                     | Not determined.                               |
| · <b>Vapor pressure at 20 °C:</b>                 | 23 hPa  |
| · <b>Density at 20 °C:</b>                        | 1.01807 g/cm <sup>3</sup>                     |
| · <b>Relative density</b>                         | Not determined.                               |
| · <b>Vapor density</b>                            | Not determined.                               |
| · <b>Evaporation rate</b>                         | Not determined.                               |
| · <b>Solubility in / Miscibility with Water:</b>  | Fully miscible.                               |
| · <b>Partition coefficient (n-octanol/water):</b> | Not determined.                               |
| · <b>Viscosity:</b>                               |   |
| <b>Dynamic at 20 °C:</b>                          | 0.952 mPas                                    |
| <b>Kinematic:</b>                                 | Not determined.                               |
| <b>Water:</b>                                     | 99.0 %  |
| <b>Solids content:</b>                            | 1.0 %   |
| · <b>Other information</b>                        | No further relevant information available.    |

### 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- on the skin:** No irritant effect.
- on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
- **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

(Contd. on page 6)

CA

# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 06/10/2022

Reviewed on 06/10/2022

**Trade name: URANIUM NITRATE, 1% AQUEOUS SOLUTION**

(Contd. of page 5)

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

### 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (Self-assessment): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 14 Transport information

- |   |                 |
|---|-----------------|
| · <b>UN-Number</b>  | Void            |
| · <b>DOT/TDG, ADR, IMDG, IATA</b>   | Void            |
| · <b>UN proper shipping name</b>  | Void            |
| · <b>DOT/TDG, ADR, IMDG, IATA</b>   | Void            |
| · <b>Transport hazard class(es)</b>   | Void            |
| · <b>DOT, ADR, ADN, IMDG, IATA</b>  | Void            |
| · <b>Class</b>  | Void            |
| · <b>Packing group</b>  | Void            |
| · <b>DOT/TDG, ADR, IMDG, IATA</b>   | Void            |
| · <b>Environmental hazards:</b>   | Not applicable. |
| · <b>Special precautions for user</b>   | Not applicable. |
| · <b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b> | Not applicable. |

(Contd. on page 7)

CA

# Safety Data Sheet

according to HPR, Schedule 1

Printing date 06/10/2022

Reviewed on 06/10/2022

**Trade name: URANIUM NITRATE, 1% AQUEOUS SOLUTION**

(Contd. of page 6)

· **UN "Model Regulation":** Void

## 15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**  
No further relevant information available.

· **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

ACTIVE

· **Canadian substance listings:**

· **Canadian Domestic Substances List (DSL)**

7732-18-5 | Deionized Water, Reagent Grade A.C.S.

· **Canadian Non-Domestic Substances List (NDSL)**

None of the ingredients is listed.

· **Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

· **Canadian Ingredient Disclosure list (limit 1%)**

None of the ingredients is listed.

· **GHS label elements** The substance is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS06    GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**

Uranyl Nitrate, Hexahydrate, Reagent ACS  
22600

· **Hazard statements**

Harmful if swallowed.

Toxic if inhaled.

May cause damage to organs through prolonged or repeated exposure.

· **Precautionary statements**

Do not breathe dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

If swallowed: Call a poison center/doctor if you feel unwell.

Rinse mouth.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a poison center/doctor.

(Contd. on page 8)



**Safety Data Sheet**  
according to HPR, Schedule 1

Printing date 06/10/2022

Reviewed on 06/10/2022

**Trade name: URANIUM NITRATE, 1% AQUEOUS SOLUTION**

(Contd. of page 7)

*Specific treatment (see on this label).*

*Get medical advice/attention if you feel unwell.*

*Store locked up.*

*Dispose of contents/container in accordance with local/regional/national/international regulations.*

· **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.*

· **Contact:**

· **Date of the latest revision of the safety data sheet** 06/10/2022 / -

· **Abbreviations and acronyms:**

*IMDG: International Maritime Code for Dangerous Goods*

*DOT: US Department of Transportation*

*IATA: International Air Transport Association*

*EINECS: European Inventory of Existing Commercial Chemical Substances*

*ELINCS: European List of Notified Chemical Substances*

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

*NFPA: National Fire Protection Association (USA)*

*HMIS: Hazardous Materials Identification System (USA)*

*PBT: Persistent, Bioaccumulative and Toxic*

*vPvB: very Persistent and very Bioaccumulative*

CA

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 10.06.2022

Revision: 10.06.2022

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

- **1.1 Product identifier**
- **Trade name:** URANIUM NITRATE, 1% AQUEOUS SOLUTION
- **Article number:** 26392-08, 26116-01
- **CAS Number:**  
7732-18-5
- **EC number:**  
231-791-2
- **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 chemicals
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: info@emsdiasum.com  
www.emsdiasum.com
- **Further information obtainable from:** Product safety department
- **1.4 Emergency telephone number:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



skull and crossbones

Acute Tox. 3 H331 Toxic if inhaled.



Acute Tox. 4 H302 Harmful 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.
- **Hazard pictograms**



GHS06

- **Signal word** Danger
- **Hazard-determining components of labelling:**  
Uranyl Nitrate, Hexahydrate, Reagent ACS  
22600

(Contd. on page 2)

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 10.06.2022

Revision: 10.06.2022

**Trade name: URANIUM NITRATE, 1% AQUEOUS SOLUTION**

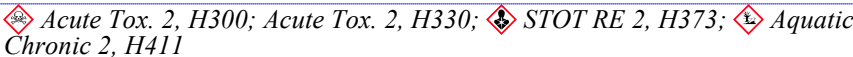
(Contd. of page 1)

- **Hazard statements**  
H302 Harmful if swallowed.  
H331 Toxic if inhaled.
- **Precautionary statements**  
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.  
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

## SECTION 3: Composition/information on ingredients

- **3.1 Chemical characterisation: Substances**
- **CAS No. Description**  
7732-18-5 Deionized Water, Reagent Grade A.C.S.
- **Identification number(s)**
- **EC number:** 231-791-2

- **Dangerous components:**

|  |  |       |
|--|--|-------|
| CAS: 13520-83-7  | Uranyl Nitrate, Hexahydrate, Reagent ACS | ≤2.5% |
| EINECS: 233-266-3  | 22600                                    |       |
|  |  |       |

## SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:**  
Immediately remove any clothing soiled by the product.  
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.  
Remove breathing equipment only after contaminated clothing have been completely removed.  
In case of irregular breathing or respiratory arrest provide artificial respiration.
- **After inhalation:**  
Supply fresh air or oxygen; call for doctor.  
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Call for a doctor immediately.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

## SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.

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- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

### **SECTION 6: Accidental release measures**

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:**  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### **SECTION 7: Handling and storage**

- **7.1 Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.  
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** Keep respiratory protective device available.
- **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:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

### **SECTION 8: Exposure controls/personal protection**

- **8.1 Control parameters**
- **Additional information about design of technical facilities:** No further data; see item 7.
- **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:**  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Store protective clothing separately.
- **Respiratory protection:**  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

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· **Protection of hands:**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

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**

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

· **Eye protection:** Goggles recommended during refilling

### SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

|                           |                 |
|---------------------------|-----------------|
| · <b>Form:</b>            | Fluid           |
| · <b>Colour:</b>          | Colourless      |
| · <b>Odour:</b>           | Characteristic  |
| · <b>Odour threshold:</b> | Not determined. |

· **pH-value:** Not determined.

· **Change in condition**

|   |        |
|---|--------|
| · <b>Melting point/freezing point:</b>            | 0 °C   |
| · <b>Initial boiling point and boiling range:</b> | 100 °C |

· **Flash point:** Not applicable.

· **Flammability (solid, gas):** Not applicable.

· **Decomposition temperature:** Not determined.

· **Auto-ignition temperature:** Not determined.

· **Explosive properties:** Product does not present an explosion hazard.

· **Explosion limits:**

|                 |                 |
|-----------------|-----------------|
| · <b>Lower:</b> | Not determined. |
| · <b>Upper:</b> | Not determined. |

· **Vapour pressure at 20 °C:** 23 hPa

|                            |                           |
|----------------------------|---------------------------|
| · <b>Density at 20 °C:</b> | 1.01807 g/cm <sup>3</sup> |
| · <b>Relative density</b>  | Not determined.           |
| · <b>Vapour density</b>    | Not determined.           |
| · <b>Evaporation rate</b>  | Not determined.           |

· **Solubility in / Miscibility with water:** Fully miscible.

· **Partition coefficient: n-octanol/water:** Not determined.

· **Viscosity:**

|                            |                 |
|----------------------------|-----------------|
| · <b>Dynamic at 20 °C:</b> | 0.952 mPas      |
| · <b>Kinematic:</b>        | Not determined. |
| · <b>Water:</b>            | 99.0 %          |

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|                         |  |
|-------------------------|--|
| VOC (EC)                | 0.00 %                                     |
| Solids content:         | 1.0 %                                      |
| · 9.2 Other information | No further relevant information available. |

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**  
Harmful if swallowed.  
Toxic if inhaled.
- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Additional toxicological information:**
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** 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.

### SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### SECTION 14: Transport information

- |   |                 |
|---|-----------------|
| · <b>14.1 UN-Number</b><br>· <b>ADR, IMDG, IATA</b>   | not regulated   |
| · <b>14.2 UN proper shipping name</b><br>· <b>ADR, IMDG, IATA</b>                           | not regulated   |
| · <b>14.3 Transport hazard class(es)</b><br>· <b>ADR, ADN, IMDG, IATA</b><br>· <b>Class</b> | not regulated   |
| · <b>14.4 Packing group</b><br>· <b>ADR, IMDG, IATA</b>                                     | not regulated   |
| · <b>14.5 Environmental hazards:</b>  | Not applicable. |
| · <b>14.6 Special precautions for user</b>  | Not applicable. |
| · <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>            | Not applicable. |
| · <b>UN "Model Regulation":</b>   | not regulated   |

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** Substance is not listed.
- **Seveso category H2 ACUTE TOXIC**
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 50 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 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.

- **Relevant phrases**  
H300 Fatal if swallowed.  
H330 Fatal if inhaled.

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*H373 May cause damage to organs through prolonged or repeated exposure.*

*H411 Toxic to aquatic life with long lasting effects.*

**· Abbreviations and acronyms:**

*ADR: Accord relatif au transport international 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 Harmonised System of Classification and Labelling of Chemicals*

*EINECS: European Inventory of Existing Commercial Chemical Substances*

*ELINCS: European List of Notified Chemical Substances*

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

*VOC: Volatile Organic Compounds (USA, EU)*

*PBT: Persistent, Bioaccumulative and Toxic*

*vPvB: very Persistent and very Bioaccumulative*

*Acute Tox. 2: Acute toxicity – Category 2*

*Acute Tox. 4: Acute toxicity – Category 4*

*Acute Tox. 3: Acute toxicity – Category 3*

*STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2*

*Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2*

GB



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## RUBRIEK 1: Identificatie van de stof of het mengsel en van de vennootschap/onderneming

- **1.1 Productidentificatie**
- **Handelsnaam:** URANIUM NITRATE, 1% AQUEOUS SOLUTION
- **Artikelnummer:** 26392-08, 26116-01
- **CAS-nummer:**  
7732-18-5
- **EC-nummer:**  
231-791-2
- **UFI:** 6Q13-F02W-V00E-FKCJ
- **1.2 Relevant geïdentificeerd gebruik van de stof of het mengsel en ontraden gebruik**  
Geen verdere relevante informatie verkrijgbaar.
- **Toepassing van de stof / van de bereiding** Laboratoriumchemicaliën
- **1.3 Details betreffende de verstrekker van het veiligheidsinformatieblad**
- **Fabrikant/leverancier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: info@emsdiasum.com  
www.emsdiasum.com
- **Aurion**  
Binnenhaven 5  
6709 PD Wageningen  
The Netherlands  
Tel: 31 317 415094  
Fax: 31 317 415955  
email: info@aurion.nl
- **Inlichtingengevende sector:** Product safety department
- **1.4 Telefoonnummer voor noodgevallen:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## RUBRIEK 2: Identificatie van de gevaren

- **2.1 Indeling van de stof of het mengsel**
- **Indeling overeenkomstig Verordening (EG) nr. 1272/2008**



GHS06 doodshoofd met gekruiste beenderen

Acute Tox. 3 H331 Giftig bij inademing.



GHS07

Acute Tox. 4 H302 Schadelijk bij inslikken.

- **2.2 Etiketteringselementen**
- **Etikettering overeenkomstig Verordening (EG) nr. 1272/2008**  
De stof product is geclassificeerd en geëtiketteerd volgens de CLP-verordening.

(Vervolg op blz. 2)

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(Vervolg van blz. 1)

· **Gevarenpictogrammen**



GHS06

· **Signaalwoord** Gevaar

· **Gevaaraanduidende componenten voor de etikettering:**

Uranyl Nitrate, Hexahydrate, Reagent ACS  
22600

· **Gevarenaanduidingen**

H302 Schadelijk bij inslikken.

H331 Giftig bij inademing.

· **Veiligheidsaanbevelingen**

P261 Inademing van stof/rook/gas/nevel/damp/spuitnevel vermijden.

P301+P312 NA INSLIKKEN: bij onwel voelen een ANTIGIFCENTRUM/arts raadplegen.

P304+P340 NA INADEMING: de persoon in de frisse lucht brengen en ervoor zorgen dat deze gemakkelijk kan ademen.

P403+P233 Op een goed geventileerde plaats bewaren. In goed gesloten verpakking bewaren.

P405 Achter slot bewaren.

P501 De inhoud en de verpakking verwerken volgens de plaatselijke/regionale/nationale/internationale voorschriften.

· **2.3 Andere gevaren**

· **Resultaten van PBT- en zPzB-beoordeling**

· **PBT:** Niet bruikbaar.

· **zPzB:** Niet bruikbaar.

## RUBRIEK 3: Samenstelling en informatie over de bestanddelen

· **3.1 Chemische karakterisering: Stoffen**

· **CAS-Nr. omschrijving**

7732-18-5 water, gedistilleerd, conductometrisch zuiverwater en dergelijk zuiver water

· **Identificatienummer(s)**

· **EC-nummer:** 231-791-2

· **Gevaarlijke inhoudstoffen:**

|  |  |       |
|--|--|-------|
| CAS: 13520-83-7  | Uranyl Nitrate, Hexahydrate, Reagent ACS | ≤2,5% |
| EINECS: 233-266-3  | 22600                                    |       |
| Acute Tox. 2, H300; Acute Tox. 2, H330;  STOT RE 2, H373;  Aquatic Chronic 2, H411 |  |       |

## RUBRIEK 4: Eerstehulpmaatregelen

· **4.1 Beschrijving van de eerstehulpmaatregelen**

· **Algemene informatie:**

Verontreinigde kleding onmiddellijk uittrekken.

Het is mogelijk dat vergiftigingssymptomen pas na vele uren optreden. Om deze reden is medische controle gedurende minstens 48 uur na een ongeval noodzakelijk.

Ademhalingsstoestel pas afnemen nadat de verontreinigde kleding verwijderd is.

Bij onregelmatige ademhaling of ademstilstand kunstmatige ademhaling toepassen.

(Vervolg op blz. 3)

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(Vervolg van blz. 2)

- **Na het inademen:**  
Verse lucht of zuurstof toedienen; deskundige medische hulp invoeren.  
Bij bewusteloosheid ligging en vervoer in stabiele zijligging.
- **Na huidcontact:** Onmiddellijk met water en zeep afwassen en goed naspoelen.
- **Na oogcontact:** Ogen met open ooglid een aantal minuten onder stromend water afspoelen en dokter raadplegen.
- **Na inslikken:** Onmiddellijk arts raadplegen.
- **4.2 Belangrijkste acute en uitgestelde symptomen en effecten** Geen verdere relevante informatie verkrijgbaar.
- **4.3 Vermelding van de vereiste onmiddellijke medische verzorging en speciale behandeling**  
Geen verdere relevante informatie verkrijgbaar.

### RUBRIEK 5: Brandbestrijdingsmaatregelen

- **5.1 Blusmiddelen**
- **Geschikte blusmiddelen:** Brandblusmaatregelen op omgeving afstemmen.
- **5.2 Speciale gevaren die door de stof of het mengsel worden veroorzaakt**  
Geen verdere relevante informatie verkrijgbaar.
- **5.3 Advies voor brandweerlieden**
- **Speciale beschermende kleding:** Ademhalingstoestel aantrekken.

### RUBRIEK 6: Maatregelen bij het accidenteel vrijkomen van de stof of het mengsel

- **6.1 Persoonlijke voorzorgsmaatregelen, beschermingsmiddelen en noodprocedures** Niet nodig.
- **6.2 Milieuvoorzorgsmaatregelen:**  
Met veel water verdunnen.  
Niet in de riolering/het oppervlaktewater/het grondwater laten terecht komen.
- **6.3 InsluTINGS- en reinigingsmethoden en -materiaal:**  
Met vloeistofbindend materiaal (zand, bergmeel, zuurbinder, universele binder, zaagmeel) opnemen.  
Besmet materiaal zoals afval volgens punt 13 verwijderen.  
Voor voldoende ventilatie zorgen.
- **6.4 Verwijzing naar andere rubrieken**  
Informatie inzake veilig gebruik - zie hoofdstuk 7.  
Informatie inzake persoonlijke beschermingsuitrusting - zie hoofdstuk 8.  
Informatie inzake berging - zie hoofdstuk 13.

### RUBRIEK 7: Hantering en opslag

- **7.1 Voorzorgsmaatregelen voor het veilig hanteren van de stof of het mengsel**  
Voor goede ventilatie/afzuiging op de werkplaatsen zorgen.  
Tanks voorzichtig openen en behandelen.  
Aërosolvorming vermijden.
- **Informatie m.b.t. brand- en ontploffingsgevaar:** Ademhalingstoestellen gereedhouden.
- **7.2 Voorwaarden voor een veilige opslag, met inbegrip van incompatibele producten**
- **Opslag:**
- **Eisen ten opzichte van opslagruimte en tanks:** Geen bijzondere eisen.
- **Informatie m.b.t. gezamenlijke opslag:** Niet noodzakelijk.
- **Verdere inlichtingen over eisen m.b.t. de opslag:** Tanks ondoordringbaar gesloten houden.
- **7.3 Specifiek eindgebruik** Geen verdere relevante informatie verkrijgbaar.

(Vervolg op blz. 4)

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### RUBRIEK 8: Maatregelen ter beheersing van blootstelling/persoonlijke bescherming

- **8.1 Controleparameters**
- **Aanvullende gegevens m.b.t. de inrichting van technische installaties:** Geen aanvullende gegevens. Zie 7.
- **Bestanddelen met grenswaarden die m.b.t. de werkruimte in acht genomen moeten worden:** Vervalt.
- **Aanvullende gegevens:** Als basis dienden lijsten die bij opstelling geldig waren.
- **8.2 Maatregelen ter beheersing van blootstelling**
- **Persoonlijke beschermingsvoorzieningen:**
- **Algemene beschermings- en gezondheidsmaatregelen:**  
Verwijderd houden van eet- en drinkwaren.  
Verontreinigde kleding onmiddellijk uittrekken.  
Vóór de pauze en aan het einde van werktijd handen wassen.  
Beschermende kleding afzonderlijk bewaren.
- **Ademhalingsbescherming:**  
Bij korte of geringe belasting ademfiltertoestel; bij intensieve resp. langdurige expositie een van de omringende lucht onafhankelijk ademhalingstoestel gebruiken.
- **Handbescherming:**  
Het handschoenmateriaal moet ondoorlatend en bestand zijn tegen het product / de stof / de bereiding.  
Op grond van falende testen kan geen aanbeveling voor handschoenmateriaal voor het product / de bereiding / het chemicaliënmengsel afgegeven worden.  
Kies handschoenmateriaal rekening houdend met de penetratietijden, de permeatiegraden en de degradatie.
- **Handschoenmateriaal**  
De keuze van een geschikte handschoen is niet alleen afhankelijk van het materiaal, maar ook van andere kwaliteitskenmerken en verschilt van fabrikant tot fabrikant.
- **Doordringingstijd van het handschoenmateriaal**  
De precieze penetratietijd kunt u te weten komen bij de handschoenfabrikant; houd er rekening mee.
- **Oogbescherming:** Bij het omgieten is het gebruik van een veiligheidsbril aan te bevelen.

### RUBRIEK 9: Fysische en chemische eigenschappen

- **9.1 Informatie over fysische en chemische basiseigenschappen**
- **Algemene gegevens**
- **Voorkomen:**

|        |           |
|--------|-----------|
| Vorm:  | Vloeibaar |
| Kleur: | Kleurloos |
- **Geur:** Karakteristiek
- **Geurdrempelwaarde:** Niet bepaald.
- **pH-waarde:** Niet bepaald.
- **Toestandsverandering**

|                               |        |
|-------------------------------|--------|
| Smelt-/vriespunt:             | 0 °C   |
| Beginkookpunt en kooktraject: | 100 °C |
- **Vlampunt:** Niet bruikbaar.
- **Ontvlambaarheid (vast, gas):** Niet bruikbaar.
- **Ontledingstemperatuur:** Niet bepaald.
- **Zelfontbrandingstemperatuur:** Niet bepaald.
- **Ontploffingseigenschappen:** Het produkt is niet ontploffingsgevaarlijk.

(Vervolg op blz. 5)

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|   |   |
|---|---|
| · <b>Ontploffingsgrenzen:</b>                     |   |
| <b>Onderste:</b>                                  | Niet bepaald.                                   |
| <b>Bovenste:</b>                                  | Niet bepaald.                                   |
| · <b>Dampspanning bij 20 °C:</b>                  | 23 hPa  |
| · <b>Dichtheid bij 20 °C:</b>                     | 1,01807 g/cm <sup>3</sup>                       |
| · <b>Relatieve dichtheid</b>                      | Niet bepaald.                                   |
| · <b>Dampdichtheid</b>                            | Niet bepaald.                                   |
| · <b>Verdampingssnelheid</b>                      | Niet bepaald.                                   |
| · <b>Oplosbaarheid in/mengbaarheid met Water:</b> | Volledig mengbaar.                              |
| · <b>Verdelingscoëfficiënt: n-octanol/water:</b>  | Niet bepaald.                                   |
| · <b>Viscositeit</b>                              |   |
| <b>Dynamisch bij 20 °C:</b>                       | 0,952 mPas                                      |
| <b>Kinematisch:</b>                               | Niet bepaald.                                   |
| <b>Water:</b>                                     | 99,0 %  |
| <b>VOC (EG)</b>                                   | 0,00 %  |
| <b>Gehalte aan vaste bestanddelen:</b>            | 1,0 %   |
| · <b>9.2 Overige informatie</b>                   | Geen verdere relevante informatie verkrijgbaar. |

### RUBRIEK 10: Stabiliteit en reactiviteit

- **10.1 Reactiviteit** Geen verdere relevante informatie verkrijgbaar.
- **10.2 Chemische stabiliteit**
- **Thermische afbraak / te vermijden omstandigheden:** Geen afbraak bij gebruik volgens voorschrift.
- **10.3 Mogelijke gevaarlijke reacties** Geen gevaarlijke reacties bekend.
- **10.4 Te vermijden omstandigheden** Geen verdere relevante informatie verkrijgbaar.
- **10.5 Chemisch op elkaar inwerkende materialen:** Geen verdere relevante informatie verkrijgbaar.
- **10.6 Gevaarlijke ontledingsproducten:** Geen gevaarlijke ontbindingsproducten bekend.

### RUBRIEK 11: Toxicologische informatie

- **11.1 Informatie over toxicologische effecten**
- **Acute toxiciteit**  
Schadelijk bij inslikken.  
Giftig bij inademing.
- **Primaire aandoening:**
- **Huidcorrosie/-irritatie** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **Ernstig oogletsel/oogirritatie** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **Sensibilisatie van de luchtwegen/de huid**  
Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **Aanvullende toxicologische informatie:**
- **CMR-effecten (kankerverwekkendheid, mutageniteit en giftigheid voor de voortplanting)**
- **Mutageniteit in geslachtscellen** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **Kankerverwekkendheid** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **Giftigheid voor de voortplanting** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **STOT bij eenmalige blootstelling** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **STOT bij herhaalde blootstelling** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.

(Vervolg op blz. 6)

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volgens 1907/2006/EG, Artikel 31

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- **Gevaar bij inademing** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.

## RUBRIEK 12: Ecologische informatie

- **12.1 Toxiciteit**
- **Aquatische toxiciteit:** Geen verdere relevante informatie verkrijgbaar.
- **12.2 Persistentie en afbreekbaarheid** Geen verdere relevante informatie verkrijgbaar.
- **12.3 Bioaccumulatie** Geen verdere relevante informatie verkrijgbaar.
- **12.4 Mobiliteit in de bodem** Geen verdere relevante informatie verkrijgbaar.
- **Verdere ecologische informatie:**
- **Algemene informatie:**  
Waterbezwaarlijkheid (NL): B(4) Weinig schadelijk voor in water levende organismen  
Gevaar voor water klasse 1 (D) (Zelfclassificatie): gevaar voor water klein  
Niet onverdund of in grote hoeveelheden lozen in grondwater, in oppervlaktewater of in de riolering.
- **12.5 Resultaten van PBT- en zPzB-beoordeling**
- **PBT:** Niet bruikbaar.
- **zPzB:** Niet bruikbaar.
- **12.6 Andere schadelijke effecten** Geen verdere relevante informatie verkrijgbaar.

## RUBRIEK 13: Instructies voor verwijdering

- **13.1 Afvalverwerkingsmethoden**
- **Aanbeveling:** Mag niet tesamen met huisvuil gestort worden of in de riolering terechtkomen.
- **Niet gereinigde verpakkingen:**
- **Aanbeveling:** Afvalverwijdering volgens overheidsbepalingen.
- **Aanbevolen reinigingsmiddel:** Water, eventueel met toevoeging van reinigingsmiddelen.

## RUBRIEK 14: Informatie met betrekking tot het vervoer

- |   |                     |
|---|---------------------|
| · <b>14.1 VN-nummer</b>   |                     |
| · <b>ADR, IMDG, IATA</b>  | Niet van toepassing |
| · <b>14.2 Juiste ladingnaam overeenkomstig de modelreglementen van de VN</b>      |                     |
| · <b>ADR, IMDG, IATA</b>  | Niet van toepassing |
| · <b>14.3 Transportgevarenklasse(n)</b>   |                     |
| · <b>ADR, ADN, IMDG, IATA</b>   |                     |
| · <b>klasse</b>   | Niet van toepassing |
| · <b>14.4 Verpakkingsgroep:</b>   |                     |
| · <b>ADR, IMDG, IATA</b>  | Niet van toepassing |
| · <b>14.5 Milieugevaren:</b>  | Niet bruikbaar.     |
| · <b>14.6 Bijzondere voorzorgen voor de gebruiker</b>                             | Niet bruikbaar.     |
| · <b>14.7 Vervoer in bulk overeenkomstig bijlage II bij Marpol en de IBC-code</b> | Niet bruikbaar.     |
| · <b>VN "Model Regulation":</b>   | Niet van toepassing |

NL

(Vervolg op blz. 7)

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### RUBRIEK 15: Regelgeving

· **15.1 Specifieke veiligheids-, gezondheids- en milieureglementen en -wetgeving voor de stof of het mengsel**

· **SZW-lijst van kankerverwekkende stoffen**

geen der bestanddelen staat op de lijst.

· **SZW-lijst van mutagene stoffen**

geen der bestanddelen staat op de lijst.

· **NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Vruchtbaarheid**

geen der bestanddelen staat op de lijst.

· **NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Ontwikkeling**

|            |  |   |
|------------|--|---|
| 13520-83-7 | Uranyl Nitrate, Hexahydrate, Reagent ACS | 2 |
|            | 22600                                    |   |

· **NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Borstvoeding**

geen der bestanddelen staat op de lijst.

· **Lijst Zeer Zorgwekkende Stoffen (ZZS)**

geen der bestanddelen staat op de lijst.

· **Lijst van Potentieel Zeer Zorgwekkende Stoffen**

geen der bestanddelen staat op de lijst.

· **Richtlijn 2012/18/EU**

· **Gevaarlijke stoffen die met naam genoemd worden - BIJLAGE I** De stof is niet aanwezig.

· **Seveso-categorie H2 ACUUT TOXISCH**

· **Drempelwaarde (ton) voor toepassing van voorschriften voor lagedrempelinrichtingen 50 t**

· **Drempelwaarde (ton) voor toepassing van voorschriften voor hogedrempelinrichtingen 200 t**

· **Verordening (EG) nr. 1907/2006 BIJLAGE XVII** Beperkingsvoorwaarden: 3

· **Richtlijn 2011/65/EU betreffende beperking van het gebruik van bepaalde gevaarlijke stoffen in elektrische en elektronische apparatuur - Bijlage II**

geen der bestanddelen staat op de lijst.

· **VERORDENING (EU) 2019/1148**

· **Bijlage I - PRECURSOREN VOOR EXPLOSIEVEN WAARVOOR EEN BEPERKING GELDT (Bovengrenswaarde ten behoeve van vergunningverlening op grond van artikel 5, lid 3)**

geen der bestanddelen staat op de lijst.

· **Bijlage II - PRECURSOREN VOOR EXPLOSIEVEN DIE MOETEN WORDEN GEMELD**

geen der bestanddelen staat op de lijst.

· **Verordening (EG) nr. 273/2004 inzake drugsprecursoren**

geen der bestanddelen staat op de lijst.

· **Verordening (EG) Nr. 111/2005 houdende voorschriften voor het toezicht op de handel tussen de Gemeenschap en derde landen in drugsprecursoren**

geen der bestanddelen staat op de lijst.

· **Nationale voorschriften:**

· **Gevaarklasse v. water:** Waterbezwaarlijkheid (NL): B(4) Weinig schadelijk voor in water levende organismen

· **15.2 Chemischeveiligheidsbeoordeling:** Een chemische veiligheidsbeoordeling is niet uitgevoerd.

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(Vervolg op blz. 8)

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### **RUBRIEK 16: Overige informatie**

*Deze gegevens zijn gebaseerd op de huidige stand van onze kennis. Zij beschrijven echter geen garantie van produkteigenschappen en vestigen geen contractuele rechtsbetrekking.*

· **Relevante zinnen**

*H300 Dodelijk bij inslikken.*

*H330 Dodelijk bij inademing.*

*H373 Kan schade aan organen veroorzaken bij langdurige of herhaalde blootstelling.*

*H411 Giftig voor in het water levende organismen, met langdurige gevolgen.*

· **Afkortingen en acroniemen:**

*ADR: Accord relatif au transport international 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 Harmonised System of Classification and Labelling of Chemicals*

*EINECS: European Inventory of Existing Commercial Chemical Substances*

*ELINCS: European List of Notified Chemical Substances*

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

*VOC: Volatile Organic Compounds (USA, EU)*

*PBT: Persistent, Bioaccumulative and Toxic*

*vPvB: very Persistent and very Bioaccumulative*

*Acute Tox. 2: Acute toxiciteit – Categorie 2*

*Acute Tox. 4: Acute toxiciteit – Categorie 4*

*Acute Tox. 3: Acute toxiciteit – Categorie 3*

*STOT RE 2: Specifieke doelorgaantoxiciteit bij herhaalde blootstelling – Categorie 2*

*Aquatic Chronic 2: Gevaar voor het aquatisch milieu - aquatisch gevaar op lange termijn – Categorie 2*



# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

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### RUBRIQUE 1: Identification de la substance/du mélange et de la société/l'entreprise

- **1.1 Identificateur de produit**
- **Nom du produit:** URANIUM NITRATE, 1% AQUEOUS SOLUTION
- **Code du produit:** 26392-08, 26116-01
- **No CAS:**  
7732-18-5
- **Numéro CE:**  
231-791-2
- **UFI:** 6Q13-F02W-V00E-FKCJ
- **1.2 Utilisations identifiées pertinentes de la substance ou du mélange et utilisations déconseillées**  
Pas d'autres informations importantes disponibles.
- **Emploi de la substance / de la préparation** Produits chimiques pour laboratoires
- **1.3 Renseignements concernant le fournisseur de la fiche de données de sécurité**
- **Producteur/fournisseur:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: info@emsdiasum.com  
www.emsdiasum.com
- **Service chargé des renseignements:** Product safety department
- **1.4 Numéro d'appel d'urgence:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### RUBRIQUE 2: Identification des dangers

- **2.1 Classification de la substance ou du mélange**
- **Classification selon le règlement (CE) n° 1272/2008**



GHS06 tête de mort sur deux tibias

Acute Tox. 3 H331 Toxique par inhalation.



GHS07

Acute Tox. 4 H302 Nocif en cas d'ingestion.

- **2.2 Éléments d'étiquetage**
- **Étiquetage selon le règlement (CE) n° 1272/2008** La substance est classifiée et étiquetée selon le règlement CLP.
- **Pictogrammes de danger**



GHS06

- **Mention d'avertissement** Danger
- **Composants dangereux déterminants pour l'étiquetage:**  
Uranyl Nitrate, Hexahydrate, Reagent ACS  
22600

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FR

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- **Mentions de danger**

H302 Nocif en cas d'ingestion.

H331 Toxique par inhalation.

- **Conseils de prudence**

P261 Éviter de respirer les poussières/fumées/gaz/brouillards/vapeurs/aérosols.

P301+P312 EN CAS D'INGESTION: Appeler un CENTRE ANTIPOISON/un médecin en cas de malaise.

P304+P340 EN CAS D'INHALATION: transporter la personne à l'extérieur et la maintenir dans une position où elle peut confortablement respirer.

P403+P233 Stocker dans un endroit bien ventilé. Maintenir le récipient fermé de manière étanche.

P405 Garder sous clef.

P501 Éliminer le contenu/récipient conformément à la réglementation locale/régionale/nationale/internationale.

- **2.3 Autres dangers**

- **Résultats des évaluations PBT et vPvB**

- **PBT:** Non applicable.

- **vPvB:** Non applicable.

### RUBRIQUE 3: Composition/informations sur les composants

- **3.1 Caractérisation chimique: Substances**

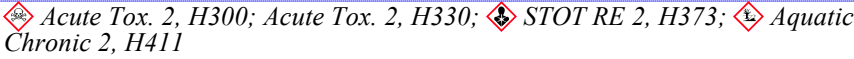
- **No CAS Désignation**

7732-18-5 eaux distillées, de conductibilité ou de même degré de pureté

- **Code(s) d'identification**

- **Numéro CE:** 231-791-2

- **Composants dangereux:**

|  |  |       |
|--|--|-------|
| CAS: 13520-83-7  | Uranyl Nitrate, Hexahydrate, Reagent ACS | ≤2,5% |
| EINECS: 233-266-3  | 22600                                    |       |
|  |  |       |

### RUBRIQUE 4: Premiers secours

- **4.1 Description des premiers secours**

- **Remarques générales:**

Enlever immédiatement les vêtements contaminés par le produit.

Les symptômes d'intoxication peuvent apparaître après de nombreuses heures seulement; une surveillance médicale est donc nécessaire au moins 48 heures après un accident.

Ne retirer la protection respiratoire qu'après avoir retiré les vêtements contaminés.

Respiration artificielle dans le cas d'une respiration irrégulière ou d'un arrêt respiratoire.

- **Après inhalation:**

Donner de l'air frais ou de l'oxygène; demander d'urgence une assistance médicale.

En cas d'inconscience, coucher et transporter la personne en position latérale stable.

- **Après contact avec la peau:** Laver immédiatement à l'eau et au savon et bien rincer.

- **Après contact avec les yeux:**

Rincer les yeux, pendant plusieurs minutes, sous l'eau courante en écartant bien les paupières et consulter un médecin.

- **Après ingestion:** Consulter immédiatement un médecin.

- **4.2 Principaux symptômes et effets, aigus et différés** Pas d'autres informations importantes disponibles.

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- **4.3 Indication des éventuels soins médicaux immédiats et traitements particuliers nécessaires**  
Pas d'autres informations importantes disponibles.

### RUBRIQUE 5: Mesures de lutte contre l'incendie

- **5.1 Moyens d'extinction**
- **Moyens d'extinction:** Adapter les mesures d'extinction d'incendie à l'environnement.
- **5.2 Dangers particuliers résultant de la substance ou du mélange**  
Pas d'autres informations importantes disponibles.
- **5.3 Conseils aux pompiers**
- **Équipement spécial de sécurité:** Porter un appareil de protection respiratoire.

### RUBRIQUE 6: Mesures à prendre en cas de dispersion accidentelle

- **6.1 Précautions individuelles, équipement de protection et procédures d'urgence** Pas nécessaire.
- **6.2 Précautions pour la protection de l'environnement:**  
Diluer avec beaucoup d'eau.  
Ne pas rejeter dans les canalisations, dans les eaux de surface et dans les nappes d'eau souterraines.
- **6.3 Méthodes et matériel de confinement et de nettoyage:**  
Recueillir les liquides à l'aide d'un produit absorbant (sable, kieselguhr, neutralisant d'acide, liant universel, sciure).  
Evacuer les matériaux contaminés en tant que déchets conformément au point 13.  
Assurer une aération suffisante.
- **6.4 Référence à d'autres rubriques**  
Afin d'obtenir des informations pour une manipulation sûre, consulter le chapitre 7.  
Afin d'obtenir des informations sur les équipements de protection personnels, consulter le chapitre 8.  
Afin d'obtenir des informations sur l'élimination, consulter le chapitre 13.

### RUBRIQUE 7: Manipulation et stockage

- **7.1 Précautions à prendre pour une manipulation sans danger**  
Veiller à une bonne ventilation/aspiration du poste de travail.  
Ouvrir et manipuler les récipients avec précaution.  
Eviter la formation d'aérosols.
- **Préventions des incendies et des explosions:** Tenir des appareils de protection respiratoire prêts.
- **7.2 Conditions d'un stockage sûr, y compris d'éventuelles incompatibilités**
- **Stockage:**
- **Exigences concernant les lieux et conteneurs de stockage:** Aucune exigence particulière.
- **Indications concernant le stockage commun:** Pas nécessaire.
- **Autres indications sur les conditions de stockage:** Tenir les emballages hermétiquement fermés.
- **7.3 Utilisation(s) finale(s) particulière(s)** Pas d'autres informations importantes disponibles.

### RUBRIQUE 8: Contrôles de l'exposition/protection individuelle

- **8.1 Paramètres de contrôle**
- **Indications complémentaires pour l'agencement des installations techniques:**  
Sans autre indication, voir point 7.
- **Composants présentant des valeurs-seuil à surveiller par poste de travail:** Néant
- **Remarques supplémentaires:**  
Le présent document s'appuie sur les listes en vigueur au moment de son élaboration.

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- **8.2 Contrôles de l'exposition**
- **Équipement de protection individuel:**
- **Mesures générales de protection et d'hygiène:**  
Tenir à l'écart des produits alimentaires, des boissons et de la nourriture pour animaux.  
Retirer immédiatement les vêtements souillés ou humectés.  
Se laver les mains avant les pauses et en fin de travail.  
Conserver à part les vêtements de protection.
- **Protection respiratoire:**  
En cas d'exposition faible ou de courte durée, utiliser un filtre respiratoire; en cas d'exposition intense ou durable, utiliser un appareil de respiration indépendant de l'air ambiant.
- **Protection des mains:**  
Le matériau des gants doit être imperméable et résistant au produit / à la substance / à la préparation.  
À cause du manque de tests, aucune recommandation pour un matériau de gants pour le produit / la préparation / le mélange de produits chimiques ne peut être donnée.  
Choix du matériau des gants en fonction des temps de pénétration, du taux de perméabilité et de la dégradation.
- **Matériau des gants**  
Le choix de gants appropriés ne dépend pas seulement du matériau, mais également d'autres critères de qualité qui peuvent varier d'un fabricant à l'autre.
- **Temps de pénétration du matériau des gants**  
Le temps de pénétration exact est à déterminer par le fabricant des gants de protection et à respecter.
- **Protection des yeux:** Lunettes de protection recommandées pour le transvasement.

### RUBRIQUE 9: Propriétés physiques et chimiques

- **9.1 Informations sur les propriétés physiques et chimiques essentielles**
- **Indications générales**
- **Aspect:**

|                 |          |
|-----------------|----------|
| <b>Forme:</b>   | Liquide  |
| <b>Couleur:</b> | Incolore |
- **Odeur:** Caractéristique
- **Seuil olfactif:** Non déterminé.
- **valeur du pH:** Non déterminé.
- **Changement d'état**

|   |        |
|---|--------|
| <b>Point de fusion/point de congélation:</b>                  | 0 °C   |
| <b>Point initial d'ébullition et intervalle d'ébullition:</b> | 100 °C |
- **Point d'éclair** Non applicable.
- **Inflammabilité (solide, gaz):** Non applicable.
- **Température de décomposition:** Non déterminé.
- **Température d'auto-inflammabilité:** Non déterminé.
- **Propriétés explosives:** Le produit n'est pas explosif.
- **Limites d'explosion:**

|                    |                |
|--------------------|----------------|
| <b>Inférieure:</b> | Non déterminé. |
| <b>Supérieure:</b> | Non déterminé. |
- **Pression de vapeur à 20 °C:** 23 hPa
- **Densité à 20 °C:** 1,01807 g/cm<sup>3</sup>
- **Densité relative** Non déterminé.
- **Densité de vapeur:** Non déterminé.

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|  |  |
|--|--|
| · <b>Taux d'évaporation:</b>                     | Non déterminé.                                     |
| · <b>Solubilité dans/miscibilité avec l'eau:</b> | Entièrement miscible                               |
| · <b>Coefficient de partage: n-octanol/eau:</b>  | Non déterminé.                                     |
| · <b>Viscosité:</b>                              |  |
| <b>Dynamique à 20 °C:</b>                        | 0,952 mPas   |
| <b>Cinématique:</b>                              | Non déterminé.                                     |
| <b>Eau:</b>                                      | 99,0 %   |
| <b>VOC (CE)</b>                                  | 0,00 %   |
| <b>Teneur en substances solides:</b>             | 1,0 %  |
| · <b>9.2 Autres informations</b>                 | Pas d'autres informations importantes disponibles. |

### RUBRIQUE 10: Stabilité et réactivité

- **10.1 Réactivité** Pas d'autres informations importantes disponibles.
- **10.2 Stabilité chimique**
- **Décomposition thermique/conditions à éviter:** Pas de décomposition en cas d'usage conforme.
- **10.3 Possibilité de réactions dangereuses** Aucune réaction dangereuse connue.
- **10.4 Conditions à éviter** Pas d'autres informations importantes disponibles.
- **10.5 Matières incompatibles:** Pas d'autres informations importantes disponibles.
- **10.6 Produits de décomposition dangereux:** Pas de produits de décomposition dangereux connus

### RUBRIQUE 11: Informations toxicologiques

- **11.1 Informations sur les effets toxicologiques**
- **Toxicité aiguë**  
Nocif en cas d'ingestion.  
Toxique par inhalation.
- **Effet primaire d'irritation:**
- **Corrosion cutanée/irritation cutanée**  
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Lésions oculaires graves/irritation oculaire**  
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Sensibilisation respiratoire ou cutanée**  
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Indications toxicologiques complémentaires:**
- **Effets CMR (cancérogène, mutagène et toxique pour la reproduction)**
- **Mutagénicité sur les cellules germinales**  
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Cancérogénicité** Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Toxicité pour la reproduction**  
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Toxicité spécifique pour certains organes cibles - exposition unique**  
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Toxicité spécifique pour certains organes cibles - exposition répétée**  
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.

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# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 10.06.2022

Révision: 10.06.2022

**Nom du produit: URANIUM NITRATE, 1% AQUEOUS SOLUTION**

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· **Danger par aspiration** Compte tenu des données disponibles, les critères de classification ne sont pas remplis.

### RUBRIQUE 12: Informations écologiques

- **12.1 Toxicité**
- **Toxicité aquatique:** Pas d'autres informations importantes disponibles.
- **12.2 Persistance et dégradabilité** Pas d'autres informations importantes disponibles.
- **12.3 Potentiel de bioaccumulation** Pas d'autres informations importantes disponibles.
- **12.4 Mobilité dans le sol** Pas d'autres informations importantes disponibles.
- **Autres indications écologiques:**
- **Indications générales:**  
Catégorie de pollution des eaux 1 (D) (Classification propre): peu polluant  
Ne pas laisser le produit, non dilué ou en grande quantité, pénétrer la nappe phréatique, les eaux ou les canalisations.
- **12.5 Résultats des évaluations PBT et VPVB**
- **PBT:** Non applicable.
- **vPvB:** Non applicable.
- **12.6 Autres effets néfastes** Pas d'autres informations importantes disponibles.

### RUBRIQUE 13: Considérations relatives à l'élimination

- **13.1 Méthodes de traitement des déchets**
- **Recommandation:** Ne doit pas être évacué avec les ordures ménagères. Ne pas laisser pénétrer dans les égouts.
- **Emballages non nettoyés:**
- **Recommandation:** Evacuation conformément aux prescriptions légales.
- **Produit de nettoyage recommandé:** Eau, éventuellement avec des produits de nettoyage

### RUBRIQUE 14: Informations relatives au transport

|  |                 |
|--|-----------------|
| · <b>14.1 Numéro ONU</b>   |                 |
| · <b>ADR, IMDG, IATA</b>   | néant           |
| · <b>14.2 Désignation officielle de transport de l'ONU</b>   |                 |
| · <b>ADR, IMDG, IATA</b>   | néant           |
| · <b>14.3 Classe(s) de danger pour le transport</b>  |                 |
| · <b>ADR, ADN, IMDG, IATA</b>  |                 |
| · <b>Classe</b>  | néant           |
| · <b>14.4 Groupe d'emballage</b>   |                 |
| · <b>ADR, IMDG, IATA</b>   | néant           |
| · <b>14.5 Dangers pour l'environnement:</b>  | Non applicable. |
| · <b>14.6 Précautions particulières à prendre par l'utilisateur</b>                                  | Non applicable. |
| · <b>14.7 Transport en vrac conformément à l'annexe II de la convention Marpol et au recueil IBC</b> | Non applicable. |
| · <b>"Règlement type" de l'ONU:</b>  | néant           |

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### RUBRIQUE 15: Informations relatives à la réglementation

· **15.1 Réglementations/législation particulières à la substance ou au mélange en matière de sécurité, de santé et d'environnement**

· **Directive 2012/18/UE**

· **Substances dangereuses désignées - ANNEXE I** la substance n'est pas comprise

· **Catégorie SEVESO H2 TOXICITÉ AIGUË**

· **Quantité seuil (tonnes) pour l'application des exigences relatives au seuil bas** 50 t

· **Quantité seuil (tonnes) pour l'application des exigences relatives au seuil haut** 200 t

· **RÈGLEMENT (CE) N° 1907/2006 ANNEXE XVII** Conditions de limitation: 3

· **Directive 2011/65/UE relative à la limitation de l'utilisation de certaines substances dangereuses dans les équipements électriques et électroniques – Annexe II**

Aucun des composants n'est compris.

· **RÈGLEMENT (UE) 2019/1148**

· **Annexe I - PRÉCURSEURS D'EXPLOSIFS FAISANT L'OBJET DE RESTRICTIONS (Valeur limite maximale aux fins de l'octroi d'une licence en vertu de l'article 5, paragraphe 3)**

Aucun des composants n'est compris.

· **Annexe II - PRÉCURSEURS D'EXPLOSIFS DEVANT FAIRE L'OBJET D'UN SIGNALEMENT**

Aucun des composants n'est compris.

· **Règlement (CE) n° 273/2004 relatif aux précurseurs de drogues**

Aucun des composants n'est compris.

· **Règlement (CE) n° 111/2005 fixant des règles pour la surveillance du commerce des précurseurs des drogues entre la Communauté et les pays tiers**

Aucun des composants n'est compris.

· **15.2 Évaluation de la sécurité chimique:** Une évaluation de la sécurité chimique n'a pas été réalisée.

### RUBRIQUE 16: Autres informations

Ces indications sont fondées sur l'état actuel de nos connaissances, mais ne constituent pas une garantie quant aux propriétés du produit et ne donnent pas lieu à un rapport juridique contractuel.

· **Phrases importantes**

H300 Mortel en cas d'ingestion.

H330 Mortel par inhalation.

H373 Risque présumé d'effets graves pour les organes à la suite d'expositions répétées ou d'une exposition prolongée.

H411 Toxique pour les organismes aquatiques, entraîne des effets néfastes à long terme.

· **Acronymes et abréviations:**

ADR: Accord relatif au transport international des marchandises dangereuses par route

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 2: Toxicité aiguë – Catégorie 2

Acute Tox. 4: Toxicité aiguë – Catégorie 4

Acute Tox. 3: Toxicité aiguë – Catégorie 3

STOT RE 2: Toxicité spécifique pour certains organes cibles (exposition répétée) – Catégorie 2

Aquatic Chronic 2: Dangers pour le milieu aquatique- toxicité à long terme pour le milieu aquatique – Catégorie 2

# Sicherheitsdatenblatt

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### ABSCHNITT 1: Bezeichnung des Stoffs beziehungsweise des Gemischs und des Unternehmens

· **1.1 Produktidentifikator**

· **Handelsname:** URANIUM NITRATE, 1% AQUEOUS SOLUTION

· **Artikelnummer:** 26392-08, 26116-01

· **CAS-Nummer:**

7732-18-5

· **EG-Nummer:**

231-791-2

· **UFI:** 6Q13-F02W-V00E-FKCJ

· **1.2 Relevante identifizierte Verwendungen des Stoffs oder Gemischs und Verwendungen, von denen abgeraten wird**

Keine weiteren relevanten Informationen verfügbar.

· **Verwendung des Stoffes / des Gemisches** Laborchemikalien

· **1.3 Einzelheiten zum Lieferanten, der das Sicherheitsdatenblatt bereitstellt**

· **Hersteller/Lieferant:**

Electron Microscopy Sciences

1560 Industry Road

USA-Hatfield, PA 19440

Tel: 215-412-8400 Fax: 215-412-8450

email: [info@emsdiasum.com](mailto:info@emsdiasum.com)

[www.emsdiasum.com](http://www.emsdiasum.com)

Science Services GmbH

Unterhachinger Str. 75

81737 München Germany

Tel: +49(0)89 18 93 668-0

[safety@scienceservices.de](mailto:safety@scienceservices.de)

Deutschland: +49 (0)89 19240, 24h Giftnotruf Munchen, [www.toxinfo.org](http://www.toxinfo.org)

Osterreich: +43 1406 43 43, Gesundheit Osterreich GmbH, 24 h

· **Auskunftgebender Bereich:** Product safety department

· **1.4 Notrufnummer:**

ChemTrec 1-800-424-9300 Contract CCN7661

1-703-527-3887

### ABSCHNITT 2: Mögliche Gefahren

· **2.1 Einstufung des Stoffs oder Gemischs**

· **Einstufung gemäß Verordnung (EG) Nr. 1272/2008**



GHS06 Totenkopf mit gekreuzten Knochen

Acute Tox. 3 H331 Giftig bei Einatmen.



GHS07

Acute Tox. 4 H302 Gesundheitsschädlich bei Verschlucken.

· **2.2 Kennzeichnungselemente**

· **Kennzeichnung gemäß Verordnung (EG) Nr. 1272/2008**

Der Stoff ist gemäß CLP-Verordnung eingestuft und gekennzeichnet.

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**Gefahrenpiktogramme**


GHS06

**Signalwort Gefahr**
**Gefahrbestimmende Komponenten zur Etikettierung:**

Uranylnitrat-Hexahydrat

**Gefahrenhinweise**

H302 Gesundheitsschädlich bei Verschlucken.

H331 Giftig bei Einatmen.

**Sicherheitshinweise**

P261 Einatmen von Staub/Rauch/Gas/Nebel/Dampf/Aerosol vermeiden.

P301+P312 BEI VERSCHLUCKEN: Bei Unwohlsein GIFTINFORMATIONSZENTRUM/Arzt anrufen.

P304+P340 BEI EINATMEN: Die Person an die frische Luft bringen und für ungehinderte Atmung sorgen.

P403+P233 An einem gut belüfteten Ort aufbewahren. Behälter dicht verschlossen halten.

P405 Unter Verschluss aufbewahren.

P501 Entsorgung des Inhalts / des Behälters gemäß den örtlichen / regionalen / nationalen / internationalen Vorschriften.

**2.3 Sonstige Gefahren**
**Ergebnisse der PBT- und vPvB-Beurteilung**
**PBT:** Nicht anwendbar.

**vPvB:** Nicht anwendbar.

### ABSCHNITT 3: Zusammensetzung/Angaben zu Bestandteilen

**3.1 Chemische Charakterisierung: Stoffe**
**CAS-Nr. Bezeichnung**

7732-18-5 Wasser

**Identifikationsnummer(n)**
**EG-Nummer:** 231-791-2

**Gefährliche Inhaltsstoffe:**

|                   |  |       |
|-------------------|--|-------|
| CAS: 13520-83-7   | Uranylnitrat-Hexahydrat  | ≤2,5% |
| EINECS: 233-266-3 | ☠ Acute Tox. 2, H300; Acute Tox. 2, H330; ☠ STOT RE 2, H373; ☠ Aquatic Chronic 2, H411 |       |

### ABSCHNITT 4: Erste-Hilfe-Maßnahmen

**4.1 Beschreibung der Erste-Hilfe-Maßnahmen**
**Allgemeine Hinweise:**

Mit Produkt verunreinigte Kleidungsstücke unverzüglich entfernen.

Vergiftungssymptome können erst nach vielen Stunden auftreten, deshalb ärztliche Überwachung mindestens 48 Stunden nach einem Unfall.

Atemschutz erst nach Entfernen verunreinigter Kleidungsstücke abnehmen.

Bei unregelmäßiger Atmung oder Atemstillstand künstliche Beatmung.

**Nach Einatmen:**

Frischlucht- oder Sauerstoffzufuhr; ärztliche Hilfe in Anspruch nehmen.

Bei Bewusstlosigkeit Lagerung und Transport in stabiler Seitenlage.

**Nach Hautkontakt:** Sofort mit Wasser und Seife abwaschen und gut nachspülen.

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- **Nach Augenkontakt:**  
*Augen bei geöffnetem Lidspalt mehrere Minuten unter fließendem Wasser abspülen und Arzt konsultieren.*
- **Nach Verschlucken:** *Sofort Arzt aufsuchen.*
- **4.2 Wichtigste akute und verzögert auftretende Symptome und Wirkungen**  
*Keine weiteren relevanten Informationen verfügbar.*
- **4.3 Hinweise auf ärztliche Soforthilfe oder Spezialbehandlung**  
*Keine weiteren relevanten Informationen verfügbar.*

### ABSCHNITT 5: Maßnahmen zur Brandbekämpfung

- **5.1 Löschmittel**
- **Geeignete Löschmittel:** *Feuerlöschmaßnahmen auf die Umgebung abstimmen.*
- **5.2 Besondere vom Stoff oder Gemisch ausgehende Gefahren**  
*Keine weiteren relevanten Informationen verfügbar.*
- **5.3 Hinweise für die Brandbekämpfung**
- **Besondere Schutzausrüstung:** *Atemschutzgerät anlegen.*

### ABSCHNITT 6: Maßnahmen bei unbeabsichtigter Freisetzung

- **6.1 Personenbezogene Vorsichtsmaßnahmen, Schutzausrüstungen und in Notfällen anzuwendende Verfahren**  
*Nicht erforderlich.*
- **6.2 Umweltschutzmaßnahmen:**  
*Mit viel Wasser verdünnen.  
Nicht in die Kanalisation/Oberflächenwasser/Grundwasser gelangen lassen.*
- **6.3 Methoden und Material für Rückhaltung und Reinigung:**  
*Mit flüssigkeitsbindendem Material (Sand, Kieselgur, Säurebinder, Universalbinder, Sägemehl) aufnehmen.  
Kontaminiertes Material als Abfall nach Abschnitt 13 entsorgen.  
Für ausreichende Lüftung sorgen.*
- **6.4 Verweis auf andere Abschnitte**  
*Informationen zur sicheren Handhabung siehe Abschnitt 7.  
Informationen zur persönlichen Schutzausrüstung siehe Abschnitt 8.  
Informationen zur Entsorgung siehe Abschnitt 13.*

### ABSCHNITT 7: Handhabung und Lagerung

- **7.1 Schutzmaßnahmen zur sicheren Handhabung**  
*Für gute Belüftung/Absaugung am Arbeitsplatz sorgen.  
Behälter mit Vorsicht öffnen und handhaben.  
Aerosolbildung vermeiden.*
- **Hinweise zum Brand- und Explosionsschutz:** *Atemschutzgeräte bereithalten.*
- **7.2 Bedingungen zur sicheren Lagerung unter Berücksichtigung von Unverträglichkeiten**
- **Lagerung:**
- **Anforderung an Lagerräume und Behälter:** *Keine besonderen Anforderungen.*
- **Zusammenlagerungshinweise:** *Nicht erforderlich.*
- **Weitere Angaben zu den Lagerbedingungen:** *Behälter dicht geschlossen halten.*
- **Lagerklasse:**
- **Klassifizierung nach Betriebssicherheitsverordnung (BetrSichV):** -

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· **7.3 Spezifische Endanwendungen** Keine weiteren relevanten Informationen verfügbar.

### ABSCHNITT 8: Begrenzung und Überwachung der Exposition/Persönliche Schutzausrüstungen

- **8.1 Zu überwachende Parameter**
- **Zusätzliche Hinweise zur Gestaltung technischer Anlagen:** Keine weiteren Angaben, siehe Abschnitt 7.
- **Bestandteile mit arbeitsplatzbezogenen, zu überwachenden Grenzwerten:** Entfällt.
- **Zusätzliche Hinweise:** Als Grundlage dienen die bei der Erstellung gültigen Listen.
  
- **8.2 Begrenzung und Überwachung der Exposition**
- **Persönliche Schutzausrüstung:**
- **Allgemeine Schutz- und Hygienemaßnahmen:**  
 Von Nahrungsmitteln, Getränken und Futtermitteln fernhalten.  
 Beschmutzte, getränkte Kleidung sofort ausziehen.  
 Vor den Pausen und bei Arbeitsende Hände waschen.  
 Getrennte Aufbewahrung der Schutzkleidung.
- **Atemschutz:**  
 Bei kurzzeitiger oder geringer Belastung Atemfiltergerät; bei intensiver bzw. längerer Exposition umluftunabhängiges Atemschutzgerät verwenden.
- **Handschutz:**  
 Das Handschuhmaterial muss undurchlässig und beständig gegen das Produkt / den Stoff / die Zubereitung sein.  
 Aufgrund fehlender Tests kann keine Empfehlung zum Handschuhmaterial für das Produkt / die Zubereitung / das Chemikaliengemisch abgegeben werden.  
 Auswahl des Handschuhmaterials unter Beachtung der Durchbruchzeiten, Permeationsraten und der Degradation.
- **Handschuhmaterial**  
 Die Auswahl eines geeigneten Handschuhs ist nicht nur vom Material, sondern auch von weiteren Qualitätsmerkmalen abhängig und von Hersteller zu Hersteller unterschiedlich.
- **Durchdringungszeit des Handschuhmaterials**  
 Die genaue Durchbruchzeit ist beim Schutzhandschuhhersteller zu erfahren und einzuhalten.
- **Augenschutz:** Beim Umfüllen Schutzbrille empfehlenswert.

### ABSCHNITT 9: Physikalische und chemische Eigenschaften

- **9.1 Angaben zu den grundlegenden physikalischen und chemischen Eigenschaften**
- **Allgemeine Angaben**
- **Aussehen:**

|                         |                  |
|-------------------------|------------------|
| <b>Form:</b>            | Flüssig          |
| <b>Farbe:</b>           | Farblos          |
| <b>Geruch:</b>          | Charakteristisch |
| <b>Geruchsschwelle:</b> | Nicht bestimmt.  |
- **pH-Wert:** Nicht bestimmt.
- **Zustandsänderung**

|                                      |        |
|--------------------------------------|--------|
| <b>Schmelzpunkt/Gefrierpunkt:</b>    | 0 °C   |
| <b>Siedebeginn und Siedebereich:</b> | 100 °C |
- **Flammpunkt:** Nicht anwendbar.
- **Entzündbarkeit (fest, gasförmig):** Nicht anwendbar.
- **Zersetzungstemperatur:** Nicht bestimmt.

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|  |  |
|--|--|
| · <b>Selbstentzündungstemperatur:</b>              | Nicht bestimmt.                                    |
| · <b>Explosive Eigenschaften:</b>                  | Das Produkt ist nicht explosionsgefährlich.        |
| · <b>Explosionsgrenzen:</b>                        |  |
| <b>Untere:</b>                                     | Nicht bestimmt.                                    |
| <b>Obere:</b>                                      | Nicht bestimmt.                                    |
| · <b>Dampfdruck bei 20 °C:</b>                     | 23 hPa   |
| · <b>Dichte bei 20 °C:</b>                         | 1,01807 g/cm <sup>3</sup>                          |
| · <b>Relative Dichte</b>                           | Nicht bestimmt.                                    |
| · <b>Dampfdichte</b>                               | Nicht bestimmt.                                    |
| · <b>Verdampfungsgeschwindigkeit</b>               | Nicht bestimmt.                                    |
| · <b>Löslichkeit in / Mischbarkeit mit Wasser:</b> | Vollständig mischbar.                              |
| · <b>Verteilungskoeffizient: n-Octanol/Wasser:</b> | Nicht bestimmt.                                    |
| · <b>Viskosität:</b>                               |  |
| <b>Dynamisch bei 20 °C:</b>                        | 0,952 mPas   |
| <b>Kinematisch:</b>                                | Nicht bestimmt.                                    |
| <b>Wasser:</b>                                     | 99,0 %   |
| <b>VOC (EU)</b>                                    | 0,00 %   |
| · <b>Festkörpergehalt:</b>                         | 1,0 %  |
| · <b>9.2 Sonstige Angaben</b>                      | Keine weiteren relevanten Informationen verfügbar. |

### ABSCHNITT 10: Stabilität und Reaktivität

- **10.1 Reaktivität** Keine weiteren relevanten Informationen verfügbar.
- **10.2 Chemische Stabilität**
- **Thermische Zersetzung / zu vermeidende Bedingungen:**  
Keine Zersetzung bei bestimmungsgemäßer Verwendung.
- **10.3 Möglichkeit gefährlicher Reaktionen** Keine gefährlichen Reaktionen bekannt.
- **10.4 Zu vermeidende Bedingungen** Keine weiteren relevanten Informationen verfügbar.
- **10.5 Unverträgliche Materialien:** Keine weiteren relevanten Informationen verfügbar.
- **10.6 Gefährliche Zersetzungsprodukte:** Keine gefährlichen Zersetzungsprodukte bekannt.

### ABSCHNITT 11: Toxikologische Angaben

- **11.1 Angaben zu toxikologischen Wirkungen**
- **Akute Toxizität**  
Gesundheitsschädlich bei Verschlucken.  
Giftig bei Einatmen.
- **Primäre Reizwirkung:**
- **Ätz-/Reizwirkung auf die Haut** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Schwere Augenschädigung/-reizung** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Sensibilisierung der Atemwege/Haut** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Zusätzliche toxikologische Hinweise:**
- **CMR-Wirkungen (krebserzeugende, erbgutverändernde und fortpflanzungsgefährdende Wirkung)**
- **Keimzell-Mutagenität** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Karzinogenität** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

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- **Reproduktionstoxizität** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Spezifische Zielorgan-Toxizität bei einmaliger Exposition**  
Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Spezifische Zielorgan-Toxizität bei wiederholter Exposition**  
Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Aspirationsgefahr** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

### ABSCHNITT 12: Umweltbezogene Angaben

- **12.1 Toxizität**
- **Aquatische Toxizität:** Keine weiteren relevanten Informationen verfügbar.
- **12.2 Persistenz und Abbaubarkeit** Keine weiteren relevanten Informationen verfügbar.
- **12.3 Bioakkumulationspotenzial** Keine weiteren relevanten Informationen verfügbar.
- **12.4 Mobilität im Boden** Keine weiteren relevanten Informationen verfügbar.
- **Weitere ökologische Hinweise:**
- **Allgemeine Hinweise:**  
Wassergefährdungsklasse 1 (Selbsteinstufung): schwach wassergefährdend  
Nicht unverdünnt bzw. in größeren Mengen in das Grundwasser, in Gewässer oder in die Kanalisation gelangen lassen.
- **12.5 Ergebnisse der PBT- und vPvB-Beurteilung**
- **PBT:** Nicht anwendbar.
- **vPvB:** Nicht anwendbar.
- **12.6 Andere schädliche Wirkungen** Keine weiteren relevanten Informationen verfügbar.

### ABSCHNITT 13: Hinweise zur Entsorgung

- **13.1 Verfahren der Abfallbehandlung**
- **Empfehlung:** Darf nicht zusammen mit Hausmüll entsorgt werden. Nicht in die Kanalisation gelangen lassen.
- **Ungereinigte Verpackungen:**
- **Empfehlung:** Entsorgung gemäß den behördlichen Vorschriften.
- **Empfohlenes Reinigungsmittel:** Wasser, gegebenenfalls mit Zusatz von Reinigungsmitteln.

### ABSCHNITT 14: Angaben zum Transport

- |  |                  |
|--|------------------|
| <ul style="list-style-type: none"> <li>· <b>14.1 UN-Nummer</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>  | entfällt         |
| <ul style="list-style-type: none"> <li>· <b>14.2 Ordnungsgemäße UN-Versandbezeichnung</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>                   | entfällt         |
| <ul style="list-style-type: none"> <li>· <b>14.3 Transportgefahrenklassen</b></li> <li>· <b>ADR, ADN, IMDG, IATA</b></li> <li>· <b>Klasse</b></li> </ul> | entfällt         |
| <ul style="list-style-type: none"> <li>· <b>14.4 Verpackungsgruppe</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>                                      | entfällt         |
| <ul style="list-style-type: none"> <li>· <b>14.5 Umweltgefahren:</b></li> </ul>  | Nicht anwendbar. |

(Fortsetzung auf Seite 7)

# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

Druckdatum: 10.06.2022

überarbeitet am: 10.06.2022

**Handelsname: URANIUM NITRATE, 1% AQUEOUS SOLUTION**

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- **14.6 Besondere Vorsichtsmaßnahmen für den Verwender** Nicht anwendbar.
- **14.7 Massengutbeförderung gemäß Anhang II des MARPOL-Übereinkommens und gemäß IBC-Code** Nicht anwendbar.
- **UN "Model Regulation":** entfällt

### ABSCHNITT 15: Rechtsvorschriften

- **15.1 Vorschriften zu Sicherheit, Gesundheits- und Umweltschutz/spezifische Rechtsvorschriften für den Stoff oder das Gemisch**
- Richtlinie 2012/18/EU
- **Namentlich aufgeführte gefährliche Stoffe - ANHANG I** Der Stoff ist nicht enthalten.
- **Seveso-Kategorie H2 AKUT TOXISCH**
- **Mengenschwelle (in Tonnen) für die Anwendung in Betrieben der unteren Klasse 50 t**
- **Mengenschwelle (in Tonnen) für die Anwendung in Betrieben der oberen Klasse 200 t**
- **VERORDNUNG (EG) Nr. 1907/2006 ANHANG XVII** Beschränkungsbedingungen: 3
- **Richtlinie 2011/65/EU zur Beschränkung der Verwendung bestimmter gefährlicher Stoffe in Elektro- und Elektronikgeräten – Anhang II**  
Keiner der Inhaltsstoffe ist enthalten.
- **VERORDNUNG (EU) 2019/1148**
- **Anhang I - BESCHRÄNKTE AUSGANGSSTOFFE FÜR EXPLOSIVSTOFFE (Oberer Konzentrationsgrenzwert für eine Genehmigung nach Artikel 5 Absatz 3)**  
Keiner der Inhaltsstoffe ist enthalten.
- **Anhang II - MELDEPFLICHTIGE AUSGANGSSTOFFE FÜR EXPLOSIVSTOFFE**  
Keiner der Inhaltsstoffe ist enthalten.
- **Verordnung (EG) Nr. 273/2004 betreffend Drogenausgangsstoffe**  
Keiner der Inhaltsstoffe ist enthalten.
- **Verordnung (EG) Nr. 111/2005 zur Festlegung von Vorschriften für die Überwachung des Handels mit Drogenaustauschstoffen zwischen der Gemeinschaft und Drittländern**  
Keiner der Inhaltsstoffe ist enthalten.
- **Nationale Vorschriften:**
- **Wassergefährdungsklasse: WGK 1 (Selbsteinstufung):** schwach wassergefährdend.
- **Sonstige Vorschriften, Beschränkungen und Verbotsverordnungen**  
Das Produkt unterliegt der Anlage 2 der Chemikalienverbotsverordnung (ChemVerbotsV) - Anforderungen in Bezug auf die Abgabe
- **15.2 Stoffsicherheitsbeurteilung:** Eine Stoffsicherheitsbeurteilung wurde nicht durchgeführt.

### ABSCHNITT 16: Sonstige Angaben

Die Angaben stützen sich auf den heutigen Stand unserer Kenntnisse, sie stellen jedoch keine Zusicherung von Produkteigenschaften dar und begründen kein vertragliches Rechtsverhältnis.

- **Relevante Sätze**  
H300 Lebensgefahr bei Verschlucken.  
H330 Lebensgefahr bei Einatmen.  
H373 Kann die Organe schädigen bei längerer oder wiederholter Exposition.

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*H411 Giftig für Wasserorganismen, mit langfristiger Wirkung.*

**Abkürzungen und Akronyme:**

*ADR: Accord relatif au transport international 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 Harmonised System of Classification and Labelling of Chemicals*

*EINECS: European Inventory of Existing Commercial Chemical Substances*

*ELINCS: European List of Notified Chemical Substances*

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

*VOC: Volatile Organic Compounds (USA, EU)*

*PBT: Persistent, Bioaccumulative and Toxic*

*vPvB: very Persistent and very Bioaccumulative*

*Acute Tox. 2: Akute Toxizität – Kategorie 2*

*Acute Tox. 4: Akute Toxizität – Kategorie 4*

*Acute Tox. 3: Akute Toxizität – Kategorie 3*

*STOT RE 2: Spezifische Zielorgan-Toxizität (wiederholte Exposition) – Kategorie 2*

*Aquatic Chronic 2: Gewässergefährdend - langfristig gewässergefährdend – Kategorie 2*

DE

**Scheda di dati di sicurezza**  
**ai sensi del regolamento 1907/2006/CE, Articolo 31**

Stampato il: 10.06.2022

Revisione: 10.06.2022

**SEZIONE 1: Identificazione della sostanza o della miscela e della società/impresa**

- **1.1 Identificatore del prodotto**
- **Denominazione commerciale:** URANIUM NITRATE, 1% AQUEOUS SOLUTION
- **Articolo numero:** 26392-08, 26116-01
- **Numero CAS:**  
7732-18-5
- **Numeri CE:**  
231-791-2
- **UFI:** 6Q13-F02W-V00E-FKCJ
- **1.2 Usi identificati pertinenti della sostanza o della miscela e usi sconsigliati**  
Non sono disponibili altre informazioni.
- **Utilizzazione della Sostanza / del Preparato** Prodotti chimici per laboratorio
- **1.3 Informazioni sul fornitore della scheda di dati di sicurezza**
- **Produttore/fornitore:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: info@emsdiasum.com  
www.emsdiasum.com
- **Societa Italiana Chimici**  
Via Rio Nell Ellba 140  
00138 Rome, Italy  
Tel: 39 06 8800211  
Fax: 39 30 06 8815313  
Web: www.sichim.com
- **Informazioni fornite da:** Product safety department
- **1.4 Numero telefonico di emergenza:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

**SEZIONE 2: Identificazione dei pericoli**

- **2.1 Classificazione della sostanza o della miscela**
- **Classificazione secondo il regolamento (CE) n. 1272/2008**



GHS06 teschio e tibie incrociate

Acute Tox. 3 H331 Tossico se inalato.



GHS07

Acute Tox. 4 H302 Nocivo se ingerito.

- **2.2 Elementi dell'etichetta**
- **Etichettatura secondo il regolamento (CE) n. 1272/2008**  
La sostanza è classificata ed etichettata conformemente al regolamento CLP.

(continua a pagina 2)



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**Pittogrammi di pericolo**

GHS06

**Avvertenza Pericolo****Componenti pericolosi che ne determinano l'etichettatura:**

Uranyl Nitrate, Hexahydrate, Reagent ACS  
22600

**Indicazioni di pericolo**

H302 Nocivo se ingerito.

H331 Tossico se inalato.

**Consigli di prudenza**

P261 Evitare di respirare la polvere/i fumi/i gas/la nebbia/i vapori/gli aerosol.

P301+P312 IN CASO DI INGESTIONE: in presenza di malessere contattare un CENTRO ANTIVELENI/un medico.

P304+P340 IN CASO DI INALAZIONE: trasportare l'infortunato all'aria aperta e mantenerlo a riposo in posizione che favorisca la respirazione.

P403+P233 Tenere il recipiente ben chiuso e in luogo ben ventilato.

P405 Conservare sotto chiave.

P501 Smaltire il prodotto/recipiente in conformità con le disposizioni locali / regionali / nazionali / internazionali.

**2.3 Altri pericoli****Risultati della valutazione PBT e vPvB**

PBT: Non applicabile.

vPvB: Non applicabile.

**SEZIONE 3: Composizione/informazioni sugli ingredienti****3.1 Caratteristiche chimiche: Sostanze****Numero CAS**

7732-18-5 acque distillate, di conducibilità o dello stesso grado di purezza

**Numero/i di identificazione**

Numeri CE: 231-791-2

**Sostanze pericolose:**

|   |  |       |
|---|--|-------|
| CAS: 13520-83-7   | Uranyl Nitrate, Hexahydrate, Reagent ACS | ≤2,5% |
| EINECS: 233-266-3   | 22600                                    |       |
| Acute Tox. 2, H300;  Acute Tox. 2, H330;  STOT RE 2, H373;  Aquatic Chronic 2, H411 |  |       |

**SEZIONE 4: Misure di primo soccorso****4.1 Descrizione delle misure di primo soccorso****Indicazioni generali:**

Allontanare immediatamente gli abiti contaminati dal prodotto.

I sintomi di avvelenamento possono comparire dopo molte ore, per tale motivo è necessaria la sorveglianza di un medico nelle 48 ore successive all'incidente.

Levarsi la maschera protettiva solamente dopo aver tolto gli abiti contaminati.

In caso di respirazione irregolare o di blocco respiratorio praticare la respirazione artificiale.

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- **Inalazione:**  
 Portare il soggetto in zona ben areata o somministrare ossigeno; chiedere l'intervento di un medico.  
 Se il soggetto è svenuto provvedere a tenerlo durante il trasporto in posizione stabile su un fianco.
- **Contatto con la pelle:** Lavare immediatamente con acqua e sapone sciacquando accuratamente.
- **Contatto con gli occhi:**  
 Lavare con acqua corrente per diversi minuti tenendo le palpebre ben aperte e consultare il medico.
- **Ingestione:** Chiamare subito il medico.
- **4.2 Principali sintomi ed effetti, sia acuti che ritardati** Non sono disponibili altre informazioni.
- **4.3 Indicazione dell'eventuale necessità di consultare immediatamente un medico e di trattamenti speciali**  
 Non sono disponibili altre informazioni.

### **SEZIONE 5: Misure antincendio**

- **5.1 Mezzi di estinzione**
- **Mezzi di estinzione idonei:** Adottare provvedimenti antiincendio nei dintorni della zona colpita.
- **5.2 Pericoli speciali derivanti dalla sostanza o dalla miscela** Non sono disponibili altre informazioni.
- **5.3 Raccomandazioni per gli addetti all'estinzione degli incendi**
- **Mezzi protettivi specifici:** Indossare il respiratore.

### **SEZIONE 6: Misure in caso di rilascio accidentale**

- **6.1 Precauzioni personali, dispositivi di protezione e procedure in caso di emergenza** Non necessario.
- **6.2 Precauzioni ambientali:**  
 Diluire abbondantemente con acqua.  
 Impedire infiltrazioni nella fognatura/nelle acque superficiali/nelle acque freatiche.
- **6.3 Metodi e materiali per il contenimento e per la bonifica:**  
 Raccogliere il liquido con materiale assorbente (sabbia, tripoli, legante di acidi, legante universale, segatura).  
 Smaltimento del materiale contaminato conformemente al punto 13.  
 Provvedere ad una sufficiente areazione.
- **6.4 Riferimento ad altre sezioni**  
 Per informazioni relative ad un manipolazione sicura, vedere capitolo 7.  
 Per informazioni relative all'equipaggiamento protettivo ad uso personale vedere Capitolo 8.  
 Per informazioni relative allo smaltimento vedere Capitolo 13.

### **SEZIONE 7: Manipolazione e immagazzinamento**

- **7.1 Precauzioni per la manipolazione sicura**  
 Accurata ventilazione/aspirazione nei luoghi di lavoro.  
 Aprire e manipolare i recipienti con cautela.  
 Evitare la formazione di aerosol.
- **Indicazioni in caso di incendio ed esplosione:** Tener pronto il respiratore.
- **7.2 Condizioni per lo stoccaggio sicuro, comprese eventuali incompatibilità**
- **Stoccaggio:**
- **Requisiti dei magazzini e dei recipienti:** Non sono richiesti requisiti particolari.
- **Indicazioni sullo stoccaggio misto:** Non necessario.
- **Ulteriori indicazioni relative alle condizioni di immagazzinamento:** Mantenere i recipienti ermeticamente chiusi.
- **7.3 Usi finali particolari** Non sono disponibili altre informazioni.

IT

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### SEZIONE 8: Controllo dell'esposizione/protezione individuale

- **8.1 Parametri di controllo**
- **Ulteriori indicazioni sulla struttura di impianti tecnici:** Nessun dato ulteriore, vedere punto 7.
- **Componenti i cui valori limite devono essere tenuti sotto controllo negli ambienti di lavoro:** Non Necessario.
- **Ulteriori indicazioni:** Le liste valide alla data di compilazione sono state usate come base.
- **8.2 Controlli dell'esposizione**
- **Mezzi protettivi individuali:**
- **Norme generali protettive e di igiene del lavoro:**  
Tenere lontano da cibo, bevande e foraggi.  
Togliere immediatamente gli abiti contaminati.  
Lavarsi le mani prima dell'intervallo o a lavoro terminato.  
Custodire separatamente l'equipaggiamento protettivo.
- **Maschera protettiva:**  
Nelle esposizioni brevi e minime utilizzare la maschera; nelle esposizioni più intense e durature indossare l'autorespiratore.
- **Guanti protettivi:**  
Il materiale dei guanti deve essere impermeabile e stabile contro il prodotto/ la sostanza/ la formulazione.  
A causa della mancanza di tests non può essere consigliato alcun tipo di materiale per i guanti con cui manipolare il prodotto / la formulazione / la miscela di sostanze chimiche.  
Scelta del materiale dei guanti in considerazione dei tempi di passaggio, dei tassi di permeazione e della degradazione.
- **Materiale dei guanti**  
La scelta dei guanti adatti non dipende soltanto dal materiale bensì anche da altre caratteristiche di qualità variabili da un produttore a un altro.
- **Tempo di permeazione del materiale dei guanti**  
Richiedere dal fornitore dei guanti il tempo di passaggio preciso il quale deve essere rispettato.
- **Occhiali protettivi:** Si consiglia l'uso di occhiali protettivi durante il travaso.

### SEZIONE 9: Proprietà fisiche e chimiche

#### · 9.1 Informazioni sulle proprietà fisiche e chimiche fondamentali

##### · Indicazioni generali

##### · Aspetto:

|                            |                |
|----------------------------|----------------|
| · <b>Forma:</b>            | Liquido        |
| · <b>Colore:</b>           | Incolore       |
| · <b>Odore:</b>            | Caratteristico |
| · <b>Soglia olfattiva:</b> | Non definito.  |

· **valori di pH:** Non definito.

##### · Cambiamento di stato

|   |        |
|---|--------|
| · <b>Punto di fusione/punto di congelamento:</b>                    | 0 °C   |
| · <b>Punto di ebollizione iniziale e intervallo di ebollizione:</b> | 100 °C |

· **Punto di infiammabilità:** Non applicabile.

· **Infiammabilità (solidi, gas):** Non applicabile.

· **Temperatura di decomposizione:** Non definito.

· **Temperatura di autoaccensione:** Non definito.

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|  |  |
|--|--|
| · <b>Proprietà esplosive:</b>                            | Prodotto non esplosivo.                  |
| · <b>Limiti di infiammabilità:</b>                       |  |
| Inferiore:   | Non definito.                            |
| Superiore:   | Non definito.                            |
| · <b>Tensione di vapore a 20 °C:</b>                     | 23 hPa                                   |
| · <b>Densità a 20 °C:</b>                                | 1,01807 g/cm <sup>3</sup>                |
| · <b>Densità relativa</b>                                | Non definito.                            |
| · <b>Densità di vapore:</b>                              | Non definito.                            |
| · <b>Velocità di evaporazione</b>                        | Non definito.                            |
| · <b>Solubilità in/Miscibilità con acqua:</b>            | Completamente miscibile.                 |
| · <b>Coefficiente di ripartizione: n-ottanolo/acqua:</b> | Non definito.                            |
| · <b>Viscosità:</b>                                      |  |
| Dinamica a 20 °C:  | 0,952 mPas                               |
| Cinematica:  | Non definito.                            |
| Acqua:   | 99,0 %                                   |
| VOC (CE)   | 0,00 %                                   |
| <b>Contenuto solido:</b>                                 | 1,0 %                                    |
| · <b>9.2 Altre informazioni</b>                          | Non sono disponibili altre informazioni. |

### SEZIONE 10: Stabilità e reattività

- **10.1 Reattività** Non sono disponibili altre informazioni.
- **10.2 Stabilità chimica**
- **Decomposizione termica/ condizioni da evitare:** Il prodotto non si decompone se utilizzato secondo le norme.
- **10.3 Possibilità di reazioni pericolose** Non sono note reazioni pericolose.
- **10.4 Condizioni da evitare** Non sono disponibili altre informazioni.
- **10.5 Materiali incompatibili:** Non sono disponibili altre informazioni.
- **10.6 Prodotti di decomposizione pericolosi:** Non sono noti prodotti di decomposizione pericolosi.

### SEZIONE 11: Informazioni tossicologiche

- **11.1 Informazioni sugli effetti tossicologici**
- **Tossicità acuta**  
Nocivo se ingerito.  
Tossico se inalato.
- **Irritabilità primaria:**
- **Corrosione/irritazione cutanea** Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Lesioni oculari gravi/irritazioni oculari gravi**  
Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Sensibilizzazione respiratoria o cutanea**  
Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Ulteriori dati tossicologici:**
- **Effetti CMR (cancerogenicità, mutagenicità e tossicità per la riproduzione)**
- **Mutagenicità delle cellule germinali**  
Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Cancerogenicità** Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.

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- **Tossicità per la riproduzione** Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Tossicità specifica per organi bersaglio (STOT) - esposizione singola**  
Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Tossicità specifica per organi bersaglio (STOT) - esposizione ripetuta**  
Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Pericolo in caso di aspirazione** Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.

### SEZIONE 12: Informazioni ecologiche

- **12.1 Tossicità**
- **Tossicità acquatica:** Non sono disponibili altre informazioni.
- **12.2 Persistenza e degradabilità** Non sono disponibili altre informazioni.
- **12.3 Potenziale di bioaccumulo** Non sono disponibili altre informazioni.
- **12.4 Mobilità nel suolo** Non sono disponibili altre informazioni.
- **Ulteriori indicazioni in materia ambientale:**
- **Ulteriori indicazioni:**  
Pericolosità per le acque classe I (D) (Autoclassificazione): poco pericoloso  
Non immettere nelle acque freatiche, nei corsi d'acqua o nelle fognature non diluito o in grandi quantità.
- **12.5 Risultati della valutazione PBT e vPvB**
- **PBT:** Non applicabile.
- **vPvB:** Non applicabile.
- **12.6 Altri effetti avversi** Non sono disponibili altre informazioni.

### SEZIONE 13: Considerazioni sullo smaltimento

- **13.1 Metodi di trattamento dei rifiuti**
- **Consigli:** Non smaltire il prodotto insieme ai rifiuti domestici Non immettere nelle fognature.
- **Imballaggi non puliti:**
- **Consigli:** Smaltimento in conformità con le disposizioni amministrative.
- **Detergente consigliato:** Acqua eventualmente con l'aggiunta di detersivi.

### SEZIONE 14: Informazioni sul trasporto

- |  |                  |
|--|------------------|
| · <b>14.1 Numero ONU</b><br>· <b>ADR, IMDG, IATA</b>   | non applicabile  |
| · <b>14.2 Nome di spedizione dell'ONU</b><br>· <b>ADR, IMDG, IATA</b>                                      | non applicabile  |
| · <b>14.3 Classi di pericolo connesso al trasporto</b><br>· <b>ADR, ADN, IMDG, IATA</b><br>· <b>Classe</b> | non applicabile  |
| · <b>14.4 Gruppo di imballaggio</b><br>· <b>ADR, IMDG, IATA</b>  | non applicabile  |
| · <b>14.5 Pericoli per l'ambiente:</b>   | Non applicabile. |
| · <b>14.6 Precauzioni speciali per gli utilizzatori</b>  | Non applicabile. |
| · <b>14.7 Trasporto di rifiuti secondo l'allegato II di MARPOL ed il codice IBC</b>                        | Non applicabile. |

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· UN "Model Regulation": non applicabile

### SEZIONE 15: Informazioni sulla regolamentazione

· **15.1 Disposizioni legislative e regolamentari su salute, sicurezza e ambiente specifiche per la sostanza o la miscela**

- **Direttiva 2012/18/UE**
- **Sostanze pericolose specificate - ALLEGATO I** La sostanza non è contenuta
- **Categoria Seveso H2 TOSSICITÀ ACUTA**
- **Quantità limite (tonnellate) ai fini dell'applicazione dei requisiti di soglia inferiore 50 t**
- **Quantità limite (tonnellate) ai fini dell'applicazione dei requisiti di soglia superiore 200 t**
- **REGOLAMENTO (CE) n. 1907/2006 ALLEGATO XVII** Restrizioni: 3

· **Direttiva 2011/65/UE sulla restrizione dell'uso di determinate sostanze pericolose nelle apparecchiature elettriche ed elettroniche - Allegato II**

Nessuno dei componenti è contenuto.

· **REGOLAMENTO (UE) 2019/1148**

· **Allegato I - PRECURSORI DI ESPLOSIVI SOGGETTI A RESTRIZIONI (Valore limite superiore ai fini della concessione di licenze a norma dell'articolo 5, paragrafo 3)**

Nessuno dei componenti è contenuto.

· **Allegato II - PRECURSORI DI ESPLOSIVI SOGGETTI A SEGNALAZIONE**

Nessuno dei componenti è contenuto.

· **Regolamento (CE) n. 273/2004 relativo ai precursori di droghe**

Nessuno dei componenti è contenuto.

· **Regolamento (CE) N. 111/2005 recante norme per il controllo del commercio dei precursori di droghe tra la Comunità e i paesi terzi**

Nessuno dei componenti è contenuto.

· **15.2 Valutazione della sicurezza chimica:** Una valutazione della sicurezza chimica non è stata effettuata.

### SEZIONE 16: Altre informazioni

I dati sono riportati sulla base delle nostre conoscenze attuali, non rappresentano tuttavia alcuna garanzia delle caratteristiche del prodotto e non motivano alcun rapporto giuridico contrattuale.

· **Fraasi rilevanti**

H300 Letale se ingerito.

H330 Letale se inalato.

H373 Può provocare danni agli organi in caso di esposizione prolungata o ripetuta.

H411 Tossico per gli organismi acquatici con effetti di lunga durata.

· **Abbreviazioni e acronimi:**

ADR: Accord relatif au transport international 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 Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 2: Tossicità acuta – Categoria 2

(continua a pagina 8)

**Scheda di dati di sicurezza**  
**ai sensi del regolamento 1907/2006/CE, Articolo 31**

Stampato il: 10.06.2022

Revisione: 10.06.2022

**Denominazione commerciale: URANIUM NITRATE, 1% AQUEOUS SOLUTION**

(Segue da pagina 7)

*Acute Tox. 4: Tossicità acuta – Categoria 4*

*Acute Tox. 3: Tossicità acuta – Categoria 3*

*STOT RE 2: Tossicità specifica per organi bersaglio (esposizione ripetuta) – Categoria 2*

*Aquatic Chronic 2: Pericoloso per l'ambiente acquatico - pericolo a lungo termine per l'ambiente acquatico – Categoria 2*

IT

# 물질안전보건자료

## GHS에 따라

인쇄일자: 2022.06.10

개정: 2022.06.10

### 1 화학제품과 회사에 관한 정보

- 제품 식별자
- 제품명: **URANIUM NITRATE, 1% AQUEOUS SOLUTION**
- 상품번호: 26392-08, 26116-01
- CAS-번호  
7732-18-5
- EC 의번호:  
231-791-2
- 해당 순물질이나 혼합물의 관련 하위용도 및 사용금지용도
- 제품의 권고 용도와 사용상의 제한: URANIUM NITRATE, 1% AQUEOUS SOLUTION
- 제품의 권고 용도와 사용상의 제한: 실험실 화학품
- 안전데이터표(Safety Data Sheet)내 공급업체 관련 상세 정보
- 제조자/수입자/유통업자 정보:  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: info@emsdiasum.com  
www.emsdiasum.com
- Samchang Commercial Co., Ltd.  
Yeo Eui Do  
PO Box 1110  
Seoul, Korea  
Tel: 82 2 703 3040  
Fax: 82 2 717 3298
- 
- Daedok Science, Co. Ltd.  
34141 E10 Korea Advanced Institute of Science  
Guseong-Dong, Yuseong-gu, Daejeon,  
Korea  
Phone: 82 42 710 2091  
Fax: 82 42 367 0005  
Website: www.labsmro.com
- 추가적인 정보 획득 가능: Product safety department
- 비상연락 전화번호:  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### 2 유해성·위험성

- 순물질 또는 혼합물의 분류



두개골과 대퇴골

급성 독성 - 흡입 - 구분3 H331 흡입하면 유독함



급성 독성 - 경구 - 구분4 H302 삼키면 유해함

- 라벨표기 요소

· **GHS 라벨 요소** 본 화학물질은 화학물질의 분류 및 표기에 관한 국제조화시스템(GHS)에 따라 분류 및 표기되었습니다.

(2 쪽에 계속)



# 물질안전보건자료 GHS에 따라

인쇄일자: 2022.06.10

개정: 2022.06.10

**제품명: URANIUM NITRATE, 1% AQUEOUS SOLUTION**

(1 쪽부터 계속)

· **GHS 그림문자**



GHS06

· **신호어 위험**

· **상표상에 명확히 위험성이 표시된 성분:**

Uranyl Nitrate, Hexahydrate, Reagent ACS  
22600

· **유해·위험문구**

삼키면 유해함  
흡입하면 유독함

· **예방조치문구**

분진·흙·가스·미스트·증기·스프레이의 흡입을 피하십시오.  
삼켰을 시: 몸에 이상이 있을 시 독성물질 센터/병원 연락 필요.  
흡입하면 신선한 공기가 있는 곳으로 옮기고 호흡하기 쉬운 자세로 안정을 취하십시오.  
독성물질 센터/병원 연락 필요.  
밀봉하여 저장하십시오.

(지방/지역/국가/국제 규정에 따라) 에 내용물/용기를 폐기하십시오.

· **기타 유해성**

· **PBT(잔류성, 생물농축성, 독성 물질) 및 vPvB(고 잔류성, 고 생물농축성 물질) 평가 결과**

· **PBT(잔류성, 생물농축성, 독성 물질):** 해당사항 없음.

· **vPvB(고 잔류성, 고 생물농축성 물질):** 해당사항 없음.

### 3 구성성분의 명칭 및 함유량

· **화 학 적 특 성:** 화학물질

· **CAS-번호표시**

7732-18-5 물

· **식별 번호**

· **EC 의번호:** 231-791-2

· **위험 요소:**

|            |   |       |
|------------|---|-------|
| 13520-83-7 | Uranyl Nitrate, Hexahydrate, Reagent ACS<br>22600   | ≤2.5% |
|            | 급성 독성 - 경구 - 구분2, H300;  급성 독성 - 흡입 - 구분2, H330;  특정표적장기 독성 - 반복 노출 - 구분2, H373;  수생환경 유해성 - 만성 - 구분2, H411 |       |

### 4 응급조치 요령

· **응급조치요령 내용**

· **일 반 적 정보:**

이 제품에 의해 오염된 의상은 즉시 제거 한다.

중독 증상은 몇 시간 이 지난 뒤에 발생할 수 있다. 따라서 사고가 발생한 후에 적어도 48 시간 동안은 의료진의 관찰을 받아야 한다.

반드시 오염된 의상을 완전히 제거한 후에 호흡 보호기를 떼어낸다.

불규칙적인 호흡이나 호흡 정지 상태에서는 인공 호흡을 실시한다.

· **흡입했을 때:**

신선한 공기나 산소를 공급받고, 의료진의 도움을 구한다.

환자가 의식을 잃었을 경우에는 안전한 자세에서 환자를 운반한다.

(3 쪽에 계속)

# 물질안전보건자료 GHS에 따라

인쇄일자: 2022.06.10

개정: 2022.06.10

**제품명: URANIUM NITRATE, 1% AQUEOUS SOLUTION**

(2 쪽부터 계속)

- **피부에 접촉했을 때:** 즉시 물과 비누로 씻고 잘 행군다.
- **눈에 들어갔을 때:** 흐르는 물에 눈을 몇 분 동안 씻어내고 나서, 의사와 상담한다.
- **먹었을 때:** 즉시 의사의 도움을 구한다.
- **기타 의사의 주의사항:**
- **가장 중요한 급·만성 증상 및 영향** 추가적인 정보가 존재하지 않습니다.
- **즉각적인 의료 처치 및 특별 치료가 필요함을 시사하는 징후** 추가적인 정보가 존재하지 않습니다.

## 5 폭발·화재시 대처방법

- **소화제**
- **적절한 소화제:** 주변 환경에 맞는 화재 진화 방법을 사용한다.
- **본 화학물질이나 혼합물에서 발생하는 특별 유해성** 추가적인 정보가 존재하지 않습니다.
- **소방관에 대한 권고사항**
- **화재 진압 시 착용할 보호구 및 예방조치:** 호흡보호장비 설치.

## 6 누출 사고 시 대처방법

- **개인적 예방조치, 보호장비 및 응급처치 절차 필요 없음.**
- **환경 관련 예방조치:**  
많은 물로 희석시킨다.  
하수도망/해수면 위 의물/지하수로 도달하지 않게 한다.
- **밀폐 및 정화 방법과 소재:**  
액체가 혼합된 물질 (모래, 규조토, 산성 결합물, 일반 결합물, 톱밥)에 흡입되도록 한다.  
항목 13에 따라 오염된 물질을 쓰레기로 처분한다.  
충분한 환기가 되도록 한다.
- **타 섹션 참조**  
안전 관리에 대한 정보는 제 7 장을 참고하십시오.  
개인 보호 장비에 대한 정보는 제 8 장을 참고하십시오.  
쓰레기 처리에 대한 정보는 제 13 장을 참고하십시오.

## 7 취급 및 저장방법

- **취급:**
- **안전 취급을 위한 예방조치**  
작업장에서는 통풍이 잘 되고/습기 제거가 잘 되게 주의한다.  
조심스럽게 용기를 개봉하거나 취급한다.  
연무질이 형성되는 것을 피한다.
- **화재 및 폭발 사고 예방대책에 관한 정보:** 호흡보호장비를 항상 비치한다.
- **혼합위험성 등 안전 저장 조건**
- **보관:**
- **안전한 저장 방법:** 특별한 요구사항이 없음.
- **하나의 공동 보관 시설에 대한 보관 관련 정보:** 필요 없음
- **보관 조건에 관한 추가적인 정보:** 용기를 새지 않게 밀폐한 채 보관한다.
- **구체적 최종 사용자** 추가적인 정보가 존재하지 않습니다.

## 8 노출방지 및 개인보호구

- **첨단시설 디자인에 대한 추가정보:** 더 이상의 자료는 없음. 항목 7을 참고하십시오.

(4 쪽에 계속)

# 물질안전보건자료 GHS에 따라

인쇄일자: 2022.06.10

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**제품명: URANIUM NITRATE, 1% AQUEOUS SOLUTION**

(3 쪽부터계속)

- 통제 변수
- 화학물질의 노출기준, 생물학적 노출기준 등: 생략
- 추가 정보: 제조할 당시에 유효한 목록을 기초로 사용했다.
  
- 노출 통제
- 개인 보호구
- 일반적보호조치및위생조치:  
 식료품, 음료수와 사료로부터 멀리 떨어져 두는 다.  
 더러워지거나 음료수가 묻은 옷은 즉시 탈의한다.  
 휴식 전 이나 작업이 끝날때마다 손을 씻는다.  
 방호복은 따로 보관한다.
- 호흡기 보호:  
 단 시간 또는 경미한 오염의 경우에는 호흡여과기를 사용한다. 심각한 또는 장기간 노출시에는 호흡보호장비를 사용한다.
- 손 보호:  
 장갑재질은제품 / 원료 / 조제를투과시키지않아야하고, 내구성이있어야한다.  
 테스트를 하지 않았기 때문에 제품 / 조제 / 화학 혼합물에 적합한 장갑재질에 대한 추천이 없다.  
 투과시간, 침투율과 저하를 고려해서 장갑 재료를 선택한다.
- 장갑의재료  
 적합한장갑의선택은재질차이뿐아니라품질기준의차이도고려하여이루어져야하고제조업자에따라서도다르게선정되어야한다.
- 장갑재료의 투과시간 정확한관통시간은보호장갑제조자에의하여인지되고, 준수되어야한다.
- 눈 보호: 옮겨부울경우추천할만한보안경.

## 9 물리화학적 특성

- 기본 물리 및 화학적 특성에 대한 정보
- 일반정보
- 외형
 

|         |        |
|---------|--------|
| 물리적 상태: | 액체의    |
| 색:      | 색소가없는  |
| 냄새:     | 특색있는   |
| 후각역치    | 알맞지않다. |
- pH: 알맞지않다.
- 상태변화
 

|                 |        |
|-----------------|--------|
| 녹는점/어는점:        | 0 °C   |
| 초기 끓는점과 끓는점 범위: | 100 °C |
- 인화점: 해당사항 없음.
- 인화성(고체, 기체): 해당사항 없음.
- 분해 온도: 알맞지않다.
- 자기점화: 알맞지않다.
- 폭발위험: 이제품은폭발위험성이없다
- 인화 또는 폭발 범위의 상한/하한
 

|      |        |
|------|--------|
| 아래로: | 알맞지않다. |
| 위로:  | 알맞지않다. |
- 증기압 의경우 20 °C: 23 hPa
- 밀도 의경우 20 °C: 1.01807 g/cm<sup>3</sup>
- 비중: 알맞지않다.

(5 쪽에계속)

# 물질안전보건자료 GHS에 따라

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**제품명: URANIUM NITRATE, 1% AQUEOUS SOLUTION**

(4 쪽부터계속)

|                 |                     |
|-----------------|---------------------|
| · 증기밀도:         | 알맞지않다.              |
| · 증발 속도:        | 알맞지않다.              |
| · 용해도:          |                     |
| 물:              | 완전히혼합할수있는           |
| · n 옥탄올/물 분배계수: | 알맞지않다.              |
| · 점도:           |                     |
| 역학성 의경우 20 °C:  | 0.952 mPas          |
| 등점성:            | 알맞지않다.              |
| 물:              | 99.0 %              |
| VOC (EU)        | 0.00 %              |
| 고체의 함량:         | 1.0 %               |
| · 기타 정보         | 추가적인 정보가 존재하지 않습니다. |

## 10 안정성 및 반응성

- 반응성 추가적인 정보가 존재하지 않습니다.
- 화학적 안정성
- 화학적 안정성 및 유해 반응의 가능성 / 피해야 할 조건: 규정에따라사용할경우해체는없다
- 유해반응 가능성 위험한반응으로는알려지지않았다.
- 피해야 할 조건 추가적인 정보가 존재하지 않습니다.
- 혼합 금지 물질: 추가적인 정보가 존재하지 않습니다.
- 유해분해물질: 위험성있는분해물들은알려지지않았다.

## 11 독성에 관한 정보

- 독성학적 영향에 대한 정보
- 급성 독성:
- 일차적 자극 효과:
- 피부 부식성 또는 자극성: 무자극
- 심한 눈 손상 또는 자극성: 무자극.
- 감각화: 민감한영향이없는것으로알려져있다.

## 12 환경에 미치는 영향

- 독성
- 수생독성: 추가적인 정보가 존재하지 않습니다.
- 지속성 및 분해성 추가적인 정보가 존재하지 않습니다.
- 환 경 시스템에서의 행 동:
- 생물농축 잠재성 추가적인 정보가 존재하지 않습니다.
- 토양내 이동성 추가적인 정보가 존재하지 않습니다.
- 추가적인 생태학 정보:
- 일반 특징:
  - 수질오염등급 1 (자체등급분류): 약하게수질오염이된
  - 희석시키지않은채대량으로지하수나, 하천으로그리고하수도망에도달하지않게한다.
- PBT(잔류성, 생물농축성, 독성 물질) 및 vPvB(고 잔류성, 고 생물농축성 물질) 평가 결과
- PBT(잔류성, 생물농축성, 독성 물질): 해당사항 없음.
- vPvB(고 잔류성, 고 생물농축성 물질): 해당사항 없음.

(6 쪽에계속)

물질안전보건자료  
GHS에 따라

인쇄일자: 2022.06.10

개정: 2022.06.10

제품명: URANIUM NITRATE, 1% AQUEOUS SOLUTION

· 기타 부작용 추가적인 정보가 존재하지 않습니다.

(5 쪽부터 계속)

13 폐기시 주의사항

- 폐기물 처리 방법
- 권고: 생활쓰레기와함께처리되어서는안된다. 하수도망으로유입되어서는안된다.
- 비위생적 포장:
- 권고: 당국의지침에입각한쓰레기처리.
- 추천 세정제: 경우에따라서세제가첨가된물

14 운송에 필요한 정보

|   |          |
|---|----------|
| · 유엔 번호<br>· ADR, IMDG, IATA  | 누락되다     |
| · UN 적정 선적명<br>· ADR, IMDG, IATA  | 누락되다     |
| · 교통 위험 클래스<br>· ADR, ADN, IMDG, IATA<br>· 등급                                   | 누락되다     |
| · 용기등급<br>· ADR, IMDG, IATA   | 누락되다     |
| · 환경적 유해물질:   | 해당사항 없음. |
| · 이용자 특별 예방조치   | 해당사항 없음. |
| · MARPOL73/78(선박으로부터의 해양오염방지협약)<br>부속서2 및 IBC Code(국제선적화물코드)에 따른<br>벌크(bulk) 운송 | 해당사항 없음. |
| · UN "모범 규제":   | 누락되다     |

15 법적 규제현황

· 산업안전보건법에 의한 규제:

|                  |                  |
|------------------|------------------|
| · 제조 등 금지물질:     | 어떠한내용물도목록화되어있지않다 |
| · 허가대상물질:        | 어떠한내용물도목록화되어있지않다 |
| · 관리대상유해물질:      | 어떠한내용물도목록화되어있지않다 |
| · 작업환경측정 대상 유해인자 | 어떠한내용물도목록화되어있지않다 |
| · 특수건강진단 대상 유해인자 | 어떠한내용물도목록화되어있지않다 |

· 해당 운물질 또는 혼합물에 대한 안전, 보건 및 환경 규제/법률 추가적인 정보가 존재하지 않습니다.

(7 쪽에 계속)

물질안전보건자료  
GHS에 따라

인쇄일자: 2022.06.10

개정: 2022.06.10

제품명: URANIUM NITRATE, 1% AQUEOUS SOLUTION

(6 쪽부터계속)

|  |                  |
|--|------------------|
| · Korean Existing Chemical Inventory                       | KE-35400         |
| · 화학물질관리법  |                  |
| · 사고대비물질   | 어떠한내용물도목록화되어있지않다 |
| · 금지물질   | 어떠한내용물도목록화되어있지않다 |
| · 제한물질   | 어떠한내용물도목록화되어있지않다 |
| · 유독물질   | 어떠한내용물도목록화되어있지않다 |
| · 허가물질   | 어떠한내용물도목록화되어있지않다 |
| · 등록 또는 신고 면제대상 화학물질                                       | 7732-18-5 물      |
| · '21년까지 등록하여야 할 암, 돌연변이, 생식능력 이상을 일으키거나 일으킬 우려가 있는 기존화학물질 | 어떠한내용물도목록화되어있지않다 |
| · 중점관리물질의 지정   |                  |
| · 표1 중점관리물질(제2조 관련)  | 어떠한내용물도목록화되어있지않다 |
| · 표2 중점관리물질(제2조 관련)  | 어떠한내용물도목록화되어있지않다 |

- GHS 라벨 요소 본 화학물질은 화학물질의 분류 및 표기에 관한 국제조화시스템(GHS)에 따라 분류 및 표기되었습니다.
- GHS 그림문자



GHS06

- 신호어 위험

· **상표상에명확히위험성이표시된성분:**  
Uranyl Nitrate, Hexahydrate, Reagent ACS  
22600

- **유해·위험문구**  
삼키면 유해함  
흡입하면 유독함

- **예방조치문구**  
분진·흙·가스·미스트·증기·스프레이의 흡입을 피하십시오.  
삼켰을 시: 몸에 이상이 있을 시 독성물질 센터/병원 연락 필요.  
흡입하면 신선한 공기가 있는 곳으로 옮기고 호흡하기 쉬운 자세로 안정을 취하십시오.  
독성물질 센터/병원 연락 필요.  
밀봉하여 저장하십시오.

- (지방/지역/국가/국제 규정에 따라) 에 내용물/용기를 폐기하십시오.
- **화학물질 안전성 평가:** 화학물질 안전성 평가가 수행되지 않음

KR

(8 쪽에계속)

# 물질안전보건자료

## GHS에 따라

인쇄일자: 2022.06.10

개정: 2022.06.10

**제품명: URANIUM NITRATE, 1% AQUEOUS SOLUTION**

(7 쪽부터계속)

### 16 그 밖의 참고사항

이 보고는 우리 지식에 대한 오늘날의 상태에 대하여 평가하고 있다  
 하지만 이 보고서는 생산 특성에 관한 보증은 기술하지 않았으며 계약적인 법률 관계에 기반을 두고 있지 않다

· **담당자:**

· **최초 작성일자:** 2022.06.10

· **개정 횟수 및 최종 개정일자:** 1 / 2022.06.10

· **약어와 두문자어:**

ADR: Accord relatif au transport international 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

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

KR

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 10.06.2022

Revisión: 10.06.2022

### SECCIÓN 1: Identificación de la sustancia o la mezcla y de la sociedad o la empresa

#### · 1.1 Identificador del producto

· **Nombre comercial:** URANIUM NITRATE, 1% AQUEOUS SOLUTION

· **Número del artículo:** 26392-08, 26116-01

· **Número CAS:**

7732-18-5

· **Número CE:**

231-791-2

· **UFI:** 6Q13-F02W-V00E-FKCJ

#### · 1.2 Usos pertinentes identificados de la sustancia o de la mezcla y usos desaconsejados

No existen más datos relevantes disponibles.

· **Utilización del producto / de la elaboración** Sustancias químicas de laboratorio

#### · 1.3 Datos del proveedor de la ficha de datos de seguridad

##### · **Fabricante/distribuidor:**

Electron Microscopy Sciences

1560 Industry Road

USA-Hatfield, PA 19440

Tel: 215-412-8400 Fax: 215-412-8450

email: info@emsdiasum.com

www.emsdiasum.com

##### Aname

C/ Perez Galdos no. 2

28693 Quijorna

Madrid, Spain

Tel: +34.91.816.89.50

Fax: +34.91.816.85.94

email: ventas@aname.es

· **Área de información:** Product safety department

#### · 1.4 Teléfono de emergencia:

ChemTrec 1-800-424-9300 Contract CCN7661

1-703-527-3887

### SECCIÓN 2: Identificación de los peligros

#### · 2.1 Clasificación de la sustancia o de la mezcla

· **Clasificación con arreglo al Reglamento (CE) n° 1272/2008**



GHS06 calavera y tibias cruzadas

Acute Tox. 3 H331 Tóxico en caso de inhalación.



GHS07

Acute Tox. 4 H302 Nocivo en caso de ingestión.

#### · 2.2 Elementos de la etiqueta

· **Etiquetado con arreglo al Reglamento (CE) n° 1272/2008**

La sustancia se ha clasificado y etiquetado de conformidad con el reglamento CLP.

( se continua en página 2 )



# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 10.06.2022

Revisión: 10.06.2022

**Nombre comercial: URANIUM NITRATE, 1% AQUEOUS SOLUTION**

( se continua en página 1 )

**Pictogramas de peligro**


GHS06

**Palabra de advertencia Peligro**
**Componentes peligrosos a indicar en el etiquetaje:**

 Uranyl Nitrate, Hexahydrate, Reagent ACS  
22600

**Indicaciones de peligro**

H302 Nocivo en caso de ingestión.

H331 Tóxico en caso de inhalación.

**Consejos de prudencia**

P261 Evitar respirar el polvo/el humo/el gas/la niebla/los vapores/el aerosol.

P301+P312 EN CASO DE INGESTIÓN: Llamar a un CENTRO DE TOXICOLOGÍA/médico si la persona se encuentra mal.

P304+P340 EN CASO DE INHALACIÓN: Transportar a la persona al aire libre y mantenerla en una posición que le facilite la respiración.

P403+P233 Almacenar en un lugar bien ventilado. Mantener el recipiente cerrado herméticamente.

P405 Guardar bajo llave.

P501 Eliminar el contenido o el recipiente conforme a la reglamentación local/regional/nacional/internacional.

**2.3 Otros peligros**
**Resultados de la valoración PBT y mPmB**
**PBT:** No aplicable.

**mPmB:** No aplicable.

### SECCIÓN 3: Composición/información sobre los componentes

**3.1 Caracterización química: Sustancias**
**Denominación N° CAS**

7732-18-5 agua destilada, de conductividad o de igualgrado de pureza

**Número(s) de identificación**
**Número CE:** 231-791-2

**Componentes peligrosos:**

|                   |  |       |
|-------------------|--|-------|
| CAS: 13520-83-7   | Uranyl Nitrate, Hexahydrate, Reagent ACS | ≤2,5% |
| EINECS: 233-266-3 | 22600                                    |       |
|                   |  |       |

### SECCIÓN 4: Primeros auxilios

**4.1 Descripción de los primeros auxilios**
**Instrucciones generales:**

Quitarse de inmediato toda prenda contaminada con el producto.

Los síntomas de intoxicación pueden presentarse después de muchas horas, por lo que se requiere una supervisión médica durante un mínimo de 48 horas después del accidente.

Antes de quitarse la protección respiratoria, quítese la ropa contaminada.

En caso de respiración irregular o apnea (paro respiratorio), hágase la respiración artificial.

( se continua en página 3 )

# Ficha de datos de seguridad

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**Nombre comercial: URANIUM NITRATE, 1% AQUEOUS SOLUTION**

( se continua en página 2 )

- **En caso de inhalación del producto:**  
Suministrar aire fresco u oxígeno; solicitar ayuda médica.  
Las personas desmayadas deben tenderse y transportarse de lado con la suficiente estabilidad.
- **En caso de contacto con la piel:** Lavar inmediatamente con agua y jabón y enjuagar bien.
- **En caso de con los ojos:**  
Limpiar los ojos abiertos durante varios minutos con agua corriente y consultar un médico.
- **En caso de ingestión:** Consultar inmediatamente un médico.
- **4.2 Principales síntomas y efectos, agudos y retardados** No existen más datos relevantes disponibles.
- **4.3 Indicación de toda atención médica y de los tratamientos especiales que deban dispensarse inmediatamente**  
No existen más datos relevantes disponibles.

### SECCIÓN 5: Medidas de lucha contra incendios

- **5.1 Medios de extinción**
- **Sustancias extintoras apropiadas:** Combatir los incendios con medidas adaptados al ambiente circundante.
- **5.2 Peligros específicos derivados de la sustancia o la mezcla** No existen más datos relevantes disponibles.
- **5.3 Recomendaciones para el personal de lucha contra incendios**
- **Equipo especial de protección:** Colocarse la protección respiratoria.

### SECCIÓN 6: Medidas en caso de vertido accidental

- **6.1 Precauciones personales, equipo de protección y procedimientos de emergencia** No es necesario.
- **6.2 Precauciones relativas al medio ambiente:**  
Diluir con mucha agua.  
Evitar que penetre en la canalización /aguas de superficie /agua subterráneas.
- **6.3 Métodos y material de contención y de limpieza:**  
Quitar con material absorbente (arena, kieselgur, aglutinante de ácidos, aglutinante universal, aserrín).  
Desechar el material contaminado como vertido según ítem 13.  
Asegurar suficiente ventilación.
- **6.4 Referencia a otras secciones**  
Ver capítulo 7 para mayor información sobre una manipulación segura.  
Ver capítulo 8 para mayor información sobre el equipo personal de protección.  
Para mayor información sobre cómo desechar el producto, ver capítulo 13.

### SECCIÓN 7: Manipulación y almacenamiento

- **7.1 Precauciones para una manipulación segura**  
Asegurar suficiente ventilación /aspiración en el puesto de trabajo.  
Abrir y manejar el recipiente con cuidado.  
Evitar la formación de aerosoles.
- **Prevención de incendios y explosiones:** Tener preparados los aparatos respiratorios.
- **7.2 Condiciones de almacenamiento seguro, incluidas posibles incompatibilidades**
- **Almacenamiento:**
- **Exigencias con respecto al almacén y los recipientes:** No se requieren medidas especiales.
- **Normas en caso de un almacenamiento conjunto:** No es necesario.
- **Indicaciones adicionales sobre las condiciones de almacenamiento:**  
Mantener el recipiente cerrado herméticamente.
- **7.3 Usos específicos finales** No existen más datos relevantes disponibles.

ES

( se continua en página 4 )

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 10.06.2022

Revisión: 10.06.2022

Nombre comercial: URANIUM NITRATE, 1% AQUEOUS SOLUTION

( se continua en página 3 )

### SECCIÓN 8: Controles de exposición/protección individual

- **8.1 Parámetros de control**
- **Instrucciones adicionales para el acondicionamiento de instalaciones técnicas:**  
Sin datos adicionales, ver punto 7.
- **Componentes con valores límite admisibles que deben controlarse en el puesto de trabajo:** Nulo.
- **Indicaciones adicionales:** Como base se han utilizado las listas vigentes en el momento de la elaboración.
- **8.2 Controles de la exposición**
- **Equipo de protección individual:**
- **Medidas generales de protección e higiene:**  
Mantener alejado de alimentos, bebidas y alimentos para animales.  
Quitarse de inmediato la ropa ensuciada o impregnada.  
Lavarse las manos antes de las pausas y al final del trabajo.  
Guardar la ropa protectora por separado.
- **Protección respiratoria:**  
Si la exposición va a ser breve o de poca intensidad, colocarse una máscara respiratoria. Para una exposición más intensa o de mayor duración, usar un aparato de respiración autónomo.
- **Protección de manos:**  
El material del guante deberá ser impermeable y resistente al producto / sustancia / preparado.  
Ante la ausencia de tests específicos, no se puede recomendar ningún material específico para guantes de protección contra el producto / preparado / mezcla de sustancias químicas.  
Selección del material de los guantes en función de los tiempos de rotura, grado de permeabilidad y degradación.
- **Material de los guantes**  
La elección del guante adecuado no depende únicamente del material, sino también de otras características de calidad, que pueden variar de un fabricante a otro.
- **Tiempo de penetración del material de los guantes**  
El tiempo de resistencia a la penetración exacto deberá ser pedido al fabricante de los guantes. Este tiempo debe ser respetado.
- **Protección de ojos:** Se recomienda el uso de gafas de protección durante el trasvase del producto.

### SECCIÓN 9: Propiedades físicas y químicas

- **9.1 Información sobre propiedades físicas y químicas básicas**
- **Datos generales**
- **Aspecto:**
- **Forma:** Líquido
- **Color:** Incoloro
- **Olor:** Característico
- **Umbral olfativo:** No determinado.
- **valor pH:** No determinado.
- **Cambio de estado**
- **Punto de fusión/punto de congelación:** 0 °C
- **Punto inicial de ebullición e intervalo de ebullición:** 100 °C
- **Punto de inflamación:** No aplicable.
- **Inflamabilidad (sólido, gas):** No aplicable.
- **Temperatura de descomposición:** No determinado.
- **Temperatura de auto-inflamación:** No determinado.

( se continua en página 5 )

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 10.06.2022

Revisión: 10.06.2022

Nombre comercial: URANIUM NITRATE, 1% AQUEOUS SOLUTION

( se continua en página 4 )

|   |  |
|---|--|
| · <b>Propiedades explosivas:</b>                  | El producto no es explosivo.                 |
| · <b>Límites de explosión:</b><br>Inferior:       | No determinado.                              |
| Superior:   | No determinado.                              |
| · <b>Presión de vapor a 20 °C:</b>                | 23 hPa                                       |
| · <b>Densidad a 20 °C:</b>                        | 1,01807 g/cm <sup>3</sup>                    |
| · <b>Densidad relativa</b>                        | No determinado.                              |
| · <b>Densidad de vapor</b>                        | No determinado.                              |
| · <b>Tasa de evaporación:</b>                     | No determinado.                              |
| · <b>Solubilidad en / miscibilidad con agua:</b>  | Completamente mezclable.                     |
| · <b>Coefficiente de reparto: n-octanol/agua:</b> | No determinado.                              |
| · <b>Viscosidad:</b><br>Dinámica a 20 °C:         | 0,952 mPas                                   |
| Cinemática:                                       | No determinado.                              |
| Agua:   | 99,0 %                                       |
| VOC (CE)  | 0,00 %                                       |
| · <b>Contenido de cuerpos sólidos:</b>            | 1,0 %  |
| · <b>9.2 Otros datos</b>                          | No existen más datos relevantes disponibles. |

### SECCIÓN 10: Estabilidad y reactividad

- **10.1 Reactividad** No existen más datos relevantes disponibles.
- **10.2 Estabilidad química**
- **Descomposición térmica / condiciones que deben evitarse:** No se descompone al emplearse adecuadamente.
- **10.3 Posibilidad de reacciones peligrosas** No se conocen reacciones peligrosas.
- **10.4 Condiciones que deben evitarse** No existen más datos relevantes disponibles.
- **10.5 Materiales incompatibles:** No existen más datos relevantes disponibles.
- **10.6 Productos de descomposición peligrosos:** No se conocen productos de descomposición peligrosos.

### SECCIÓN 11: Información toxicológica

- **11.1 Información sobre los efectos toxicológicos**
- **Toxicidad aguda**  
Nocivo en caso de ingestión.  
Tóxico en caso de inhalación.
- **Efecto estimulante primario:**
- **Corrosión o irritación cutáneas** A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Lesiones o irritación ocular graves**  
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Sensibilización respiratoria o cutánea**  
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Indicaciones toxicológicas adicionales:**
- **Efectos CMR (carcinogenicidad, mutagenicidad y toxicidad para la reproducción)**
- **Mutagenicidad en células germinales**  
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Carcinogenicidad** A la vista de los datos disponibles, no se cumplen los criterios de clasificación.

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- **Toxicidad para la reproducción** A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Toxicidad específica en determinados órganos (STOT) – exposición única**  
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Toxicidad específica en determinados órganos (STOT) – exposición repetida**  
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Peligro de aspiración** A la vista de los datos disponibles, no se cumplen los criterios de clasificación.

### SECCIÓN 12: Información ecológica

- **12.1 Toxicidad**
- **Toxicidad acuática:** No existen más datos relevantes disponibles.
- **12.2 Persistencia y degradabilidad** No existen más datos relevantes disponibles.
- **12.3 Potencial de bioacumulación** No existen más datos relevantes disponibles.
- **12.4 Movilidad en el suelo** No existen más datos relevantes disponibles.
- **Indicaciones medioambientales adicionales:**
- **Indicaciones generales:**  
Nivel de riesgo para el agua 1 (autoclasiación): escasamente peligroso para el agua  
En estado diluido o no neutralizado, no dejar que se infiltre en aguas subterráneas, aguas superficiales o en alcantarillados.
- **12.5 Resultados de la valoración PBT y mPmB**
- **PBT:** No aplicable.
- **mPmB:** No aplicable.
- **12.6 Otros efectos adversos** No existen más datos relevantes disponibles.

### SECCIÓN 13: Consideraciones relativas a la eliminación

- **13.1 Métodos para el tratamiento de residuos**
- **Recomendación:** No debe desecharse con la basura doméstica. No debe llegar al alcantarillado.
- **Embalajes sin limpiar:**
- **Recomendación:** Eliminar conforme a las disposiciones oficiales.
- **Producto de limpieza recomendado:** Agua, eventualmente añadiendo productos de limpieza.

### SECCIÓN 14: Información relativa al transporte

- |  |               |
|--|---------------|
| · <b>14.1 Número ONU</b>   |               |
| · <b>ADR, IMDG, IATA</b>   | suprimido     |
| · <b>14.2 Designación oficial de transporte de las Naciones Unidas</b> |               |
| · <b>ADR, IMDG, IATA</b>   | suprimido     |
| · <b>14.3 Clase(s) de peligro para el transporte</b>                   |               |
| · <b>ADR, ADN, IMDG, IATA</b>  |               |
| · <b>Clase</b>   | suprimido     |
| · <b>14.4 Grupo de embalaje</b>  |               |
| · <b>ADR, IMDG, IATA</b>   | suprimido     |
| · <b>14.5 Peligros para el medio ambiente:</b>                         | No aplicable. |
| · <b>14.6 Precauciones particulares para los usuarios</b>              | No aplicable. |

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- **14.7 Transporte a granel con arreglo al anexo II del Convenio MARPOL y el Código IBC** No aplicable.
- **"Reglamentación Modelo" de la UNECE:** suprimido

### SECCIÓN 15: Información reglamentaria

- **15.1 Reglamentación y legislación en materia de seguridad, salud y medio ambiente específicas para la sustancia o la mezcla**
- **Directiva 2012/18/UE**
- **Sustancias peligrosas nominadas - ANEXO I** No contiene la sustancia.
- **Categoría Seveso H2 TOXICIDAD AGUDA**
- **Cantidad umbral (toneladas) a efectos de aplicación de los requisitos de nivel inferior** 50 t
- **Cantidad umbral (toneladas) a efectos de aplicación de los requisitos de nivel superior** 200 t
- **REGLAMENTO (CE) n° 1907/2006 ANEXO XVII Restricciones:** 3

- **Directiva 2011/65/UE sobre restricciones a la utilización de determinadas sustancias peligrosas en aparatos eléctricos y electrónicos - Anexo II**

ninguno de los componentes está incluido en una lista

- **REGLAMENTO (UE) 2019/1148**

- **Anexo I - PRECURSORES DE EXPLOSIVOS RESTRINGIDOS (Valor límite superior a efectos de la concesión de licencias con arreglo al artículo 5, apartado 3)**

ninguno de los componentes está incluido en una lista

- **Anexo II - PRECURSORES DE EXPLOSIVOS NOTIFICABLES**

ninguno de los componentes está incluido en una lista

- **Reglamento (CE) no 273/2004 sobre precursores de drogas**

ninguno de los componentes está incluido en una lista

- **Reglamento (CE) N o 111/2005 por el que establecen normas para la vigilancia del comercio de precursores de drogas entre la Comunidad y terceros países**

ninguno de los componentes está incluido en una lista

- **15.2 Evaluación de la seguridad química:** Una evaluación de la seguridad química no se ha llevado a cabo.

### SECCIÓN 16: Otra información

Los datos se fundan en el estado actual de nuestros conocimientos, pero no constituyen garantía alguna de cualidades del producto y no generan ninguna relación jurídica contractual.

- **Frases relevantes**

H300 Mortal en caso de ingestión.

H330 Mortal en caso de inhalación.

H373 Puede provocar daños en los órganos tras exposiciones prolongadas o repetidas.

H411 Tóxico para los organismos acuáticos, con efectos nocivos duraderos.

- **Abreviaturas y acrónimos:**

ADR: Accord relatif au transport international 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 Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

VOC: Volatile Organic Compounds (USA, EU)

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*PBT: Persistent, Bioaccumulative and Toxic*

*vPvB: very Persistent and very Bioaccumulative*

*Acute Tox. 2: Toxicidad aguda – Categoría 2*

*Acute Tox. 4: Toxicidad aguda – Categoría 4*

*Acute Tox. 3: Toxicidad aguda – Categoría 3*

*STOT RE 2: Toxicidad específica en determinados órganos (exposiciones repetidas) – Categoría 2*

*Aquatic Chronic 2: Peligroso para el medio ambiente acuático - peligro acuático a largo plazo – Categoría 2*

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