

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Aluminium ammonium sulfate dodecahydrate for analysis, ACS

Revision date: 19.05.2023

Product code: 20346

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

##### 1.1. Product identifier

Aluminium ammonium sulfate dodecahydrate for analysis, ACS

CAS No: 7784-26-1

EC No: 232-055-3

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

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

Laboratory chemical

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

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

###### Uses advised against

Do not use for private purposes (household).

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

Company name: AnalytiChem GmbH

Street: Stempelstraße 6

Place: D-47167 Duisburg

Telephone: 0203/5194-0

Telefax: 0203/5194-290

E-mail: info@analytichem.de

Contact person: Abteilung Produktsicherheit

Telephone: 0203/5194-107/117

E-mail: produktsicherheit@analytichem.de

Internet: www.analytichem.de

Responsible Department: Abteilung Produktsicherheit

##### 1.4. Emergency telephone number:

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

##### Further Information

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

#### SECTION 2: Hazards identification

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

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

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

##### 2.2. Label elements

##### 2.3. Other hazards

No information available.

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

##### 3.1. Substances

Sum formula:  $\text{NH}_4\text{Al}(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O}$

Molecular weight: 453,33 g/mol

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**Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
7784-26-1	sulfuric acid, aluminum ammonium salt (2:1:1), dodecahydrate			100 %
	232-055-3			

Full text of H and EUH statements: see section 16.

**Specific Conc. Limits, M-factors and ATE**

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
7784-26-1	232-055-3	sulfuric acid, aluminum ammonium salt (2:1:1), dodecahydrate	100 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 2000 mg/kg		

**Further Information**

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

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

**General information**

No data available

**After inhalation**

Provide fresh air.

Call a doctor if you feel unwell.

**After contact with skin**

Wash with plenty of water.

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

**After contact with eyes**

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

**After ingestion**

Rinse mouth immediately and drink plenty of water.

Call a doctor if you feel unwell.

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

Vomiting

Gastrointestinal complaints

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

No data available

**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

**Suitable extinguishing media**

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

**Unsuitable extinguishing media**

no restriction

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

Non-flammable.

Hazardous combustion products

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In case of fire may be liberated:

Sulphur oxides

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

#### **5.3. Advice for firefighters**

Remove persons to safety.

Do not inhale explosion and combustion gases.

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

#### **Additional information**

Move undamaged containers from immediate hazard area if it can be done safely. Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet.

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

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

##### **For non-emergency personnel**

Provide adequate ventilation.

Use personal protection equipment.

Avoid contact with skin, eyes and clothes.

Remove persons to safety.

Emergency procedures

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

##### **For emergency responders**

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

#### **6.2. Environmental precautions**

Do not allow to enter into surface water or drains.

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

##### **For containment**

Cover drains.

Prevent spread over a wide area (e.g. by containment or oil barriers).

Collect in closed and suitable containers for disposal.

Take up carefully when dry. Take up dust-free and set down dust-free.

##### **For cleaning up**

Clean contaminated articles and floor according to the environmental legislation.

##### **Other information**

Provide adequate ventilation.

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

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

#### **6.4. Reference to other sections**

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

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

#### **7.1. Precautions for safe handling**

##### **Advice on safe handling**

Behälter mit Vorsicht öffnen und handhaben.

Persönliche Schutzausrüstung verwenden.

Do not breathe dust.

##### **Advice on protection against fire and explosion**

No special fire protection measures are necessary.

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**Advice on general occupational hygiene**

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.

**Further information on handling**

Keep container tightly closed.

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

**Requirements for storage rooms and vessels**

Store in a dry place.

**Hints on joint storage**

No special measures are necessary.

**Further information on storage conditions**

storage temperature: +15°C - +25°C

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

Laboratory chemicals

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

**8.1. Control parameters**

**DNEL/DMEL values**

CAS No	Substance			
DNEL type	Exposure route	Effect	Value	
7784-26-1	sulfuric acid, aluminum ammonium salt (2:1:1), dodecahydrate			
Worker DNEL, long-term	inhalation	systemic	71,1 mg/m <sup>3</sup>	
Consumer DNEL, long-term	oral	systemic	5,04 mg/kg bw/day	

**PNEC values**

CAS No	Substance	
Environmental compartment	Value	
7784-26-1	sulfuric acid, aluminum ammonium salt (2:1:1), dodecahydrate	
Freshwater	0,114 mg/l	
Freshwater (intermittent releases)	0,329 mg/l	
Marine water	0,011 mg/l	
Micro-organisms in sewage treatment plants (STP)	100 mg/l	

**8.2. Exposure controls**

**Appropriate engineering controls**

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

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

**Eye/face protection**

Wear eye/face protection.

**Hand protection**

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

By long-term hand contact:

Trade name/designation: KCL 741 Dermatril® L

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

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Wearing time with permanent contact: >480min

By short-term hand contact:

Trade name/designation: KCL 741 Dermatril® L

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

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

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

**Skin protection**

Wear suitable protective clothing.

**Respiratory protection**

Respiratory protection necessary at: dust formation

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

**Environmental exposure controls**

Do not allow to enter into surface water or drains.

**SECTION 9: Physical and chemical properties**

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

Physical state:	solid
Colour:	white
Odour:	odourless
Odour threshold:	No data available
Melting point/freezing point:	93 °C
Boiling point or initial boiling point and boiling range:	280 °C
Flammability:	No data available
Lower explosion limits:	No data available
Upper explosion limits:	No data available
Flash point:	X
Auto-ignition temperature:	No data available
Decomposition temperature:	>280 °C
pH-Value (at 25 °C):	2,6 (100 g/l)
Viscosity / kinematic:	No data available
Water solubility: (at 20 °C)	150 g/L
Solubility in other solvents not determined	
Dissolution rate:	No data available
Partition coefficient n-octanol/water:	No data available
Dispersion stability:	No data available
Vapour pressure:	No data available
Vapour pressure:	No data available
Density (at 20 °C):	1,643 g/cm³
Bulk density:	700-800 kg/m³
Relative vapour density:	No data available
Particle characteristics:	No data available

**9.2. Other information**

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#### Information with regard to physical hazard classes

Sustaining combustion:	No data available
Self-ignition temperature	
Solid:	No data available
Gas:	No data available
Oxidizing properties	
Not oxidising.	

#### Other safety characteristics

Evaporation rate:	No data available
Solvent separation test:	No data available
Solvent content:	0
Solid content:	100%
Sublimation point:	No data available
Softening point:	No data available
Pour point:	No data available
Viscosity / dynamic:	No data available
Flow time:	No data available

#### Further Information

No data available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

### 10.3. Possibility of hazardous reactions

Oxidising agent, strong

### 10.4. Conditions to avoid

none

### 10.5. Incompatible materials

No information available.

### 10.6. Hazardous decomposition products

In case of fire:  
SECTION 5: Firefighting measures

#### Further information

No data available

## SECTION 11: Toxicological information

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

#### Toxicokinetics, metabolism and distribution

No data available

#### Acute toxicity

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

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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
7784-26-1	sulfuric acid, aluminum ammonium salt (2:1:1), dodecahydrate				
	oral	LD50 > 2000 mg/kg	Rat	Study report (2003)	OECD Guideline 423
	dermal	LD50 > 2000 mg/kg	Rat	Study report (2003)	OECD Guideline 402

**Irritation and corrosivity**

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

**Sensitising effects**

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

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

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

**STOT-single exposure**

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

**STOT-repeated exposure**

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

**Aspiration hazard**

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

**Specific effects in experiment on an animal**

No data available

**Additional information on tests**

No data available

**Practical experience**

No data available

**11.2. Information on other hazards**

**Other information**

No data available

**Further information**

No data available

**SECTION 12: Ecological information**

**12.1. Toxicity**

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
7784-26-1	sulfuric acid, aluminum ammonium salt (2:1:1), dodecahydrate					
	Acute fish toxicity	LC50	104 mg/l	96 h	Danio rerio	Study report (2003) OECD Guideline 203
	Acute algae toxicity	ErC50	14 mg/l	72 h	Raphidocelis subcapitata	Study report (2010) OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	ca. 600	48 h	Daphnia magna	REACH Registration Dossier OECD Guideline 202
	Fish toxicity	NOEC mg/l	0,169	60 d	Salvelinus fontinalis	ISBN 9241571942 (1989) OECD Guideline 210
	Crustacea toxicity	NOEC mg/l	0,076	21 d	Daphnia magna	Study report (2000) OECD Guideline 211
	Acute bacteria toxicity	(EC50 mg/l)	> 1000	3 h	activated sludge, domestic	Study report (2010) OECD Guideline 209

**12.2. Persistence and degradability**

No data available

**12.3. Bioaccumulative potential**

No data available

**12.4. Mobility in soil**

No data available

**12.5. Results of PBT and vPvB assessment**

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

No data available

**12.6. Endocrine disrupting properties**

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

**12.7. Other adverse effects**

Do not empty into drains.

**Further information**

Avoid release to the environment.

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

**Disposal recommendations**

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

Do not empty into drains.

**Contaminated packaging**

Wash with plenty of water. Completely emptied packages can be recycled.

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

**SECTION 14: Transport information**

**Land transport (ADR/RID)**

**14.1. UN number or ID number:**

No dangerous good in sense of this transport regulation.

**14.2. UN proper shipping name:**

No dangerous good in sense of this transport regulation.

**14.3. Transport hazard class(es):**

No dangerous good in sense of this transport regulation.

**14.4. Packing group:**

No dangerous good in sense of this transport regulation.

**Inland waterways transport (ADN)**



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

#### Marine transport (IMDG)

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

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

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

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

#### 14.6. Special precautions for user

No information available.

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

not applicable

## SECTION 15: Regulatory information

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

#### EU regulatory information

Restrictions on use (REACH, annex XVII):  
Entry 65

#### National regulatory information

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

## SECTION 16: Other information

#### Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route  
(European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service  
LC50: Lethal concentration, 50%  
LD50: Lethal dose, 50%

#### Further Information

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