

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 3/18/2023 Version: 1.1

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

### 1.1. Product identifier

Product form : Substance

Trade name : Ammonium acetate, eluent additive for LC-MS

EC-No. : 211-162-9 CAS-No. : 631-61-8

REACH registration No. : 01-2119828440-45

Product code : CL00.2722

Type of product : Pure substance, Hygroscopic substance. Preventive measures apply to the substance in dry

state only

Formula : C2H7NO2

Synonyms : acetic acid, ammonium salt / ammonium acetate / ammonium acetate, pour analyses /

ammonium acétate, technique

BIG No : 13452

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

### 1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemical

## 1.2.2. Uses advised against

No additional information available

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

Chem-Lab nv

Industriezone 'De arend 2'

Zedelgem - Belgium

Belgium

T +32 50 288320

info@chem-lab.be - https://www.chem-lab.be

# 1.4. Emergency telephone number

Emergency number : +32 50 28 83 20

# **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

## Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

## Adverse physicochemical, human health and environmental effects

No additional information available

# 2.2. Label elements

### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

No labelling applicable

## 2.3. Other hazards

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

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

### 3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Ammonium acetate, eluent additive for LC-MS	CAS-No.: 631-61-8 EC-No.: 211-162-9 REACH-no: 01-2119828440- 45	100	Not classified

### 3.2. Mixtures

Not applicable

## **SECTION 4: First aid measures**

## 4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice.

First-aid measures after inhalation : Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

First-aid measures after skin contact : Rinse with water. Do not apply (chemical) neutralizing agents without medical advice. Take

victim to a doctor if irritation persists.

First-aid measures after eye contact : Rinse with water. Remove contact lenses, if present and easy to do. Continue rinsing. Do

not apply (chemical) neutralizing agents without medical advice.

First-aid measures after ingestion : Rinse mouth with water. Do not apply (chemical) neutralizing agents without medical advice.

Call Poison Information Centre (www.big.be/antigif.html). Consult a doctor/medical service if

you feel unwell. Ingestion of large quantities: immediately to hospital.

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

Symptoms/effects after inhalation : Irritation of the respiratory tract. Irritation of the nasal mucous membranes. Respiratory

difficulties.

Symptoms/effects after skin contact : Slight irritation. Symptoms/effects after eye contact : Slight irritation.

Symptoms/effects after ingestion : AFTER INGESTION OF HIGH QUANTITIES: Nausea. Vomiting.

Chronic symptoms : ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Dry skin. Red skin.

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

No additional information available

### **SECTION 5: Firefighting measures**

### 5.1. Extinguishing media

Suitable extinguishing media : Quick-acting ABC powder extinguisher. Class A foam extinguisher. Water (quick-acting

extinguisher, reel). Water. Class A foam.

Unsuitable extinguishing media : Quick-acting BC powder extinguisher. Quick-acting CO2 extinguisher.

# 5.2. Special hazards arising from the substance or mixture

Fire hazard : DIRECT FIRE HAZARD: Not classified as flammable. Most organic solids may burn if

strongly heated. INDIRECT FIRE HAZARD: Heating increases the fire hazard.

Explosion hazard : DIRECT EXPLOSION HAZARD: Most organic solids are liable to dust explosion hazard.

INDIDECT EXPLOSION HAZARD. Dividual and he invited has a mark

INDIRECT EXPLOSION HAZARD: Dust cloud can be ignited by a spark.

Hazardous decomposition products in case of fire : On burning: release of toxic and corrosive gases/vapours (nitrous vapours, carbon

monoxide - carbon dioxide).

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## 5.3. Advice for firefighters

Precautionary measures fire : Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to

fire/heat: have neighbourhood close doors and windows.

Firefighting instructions : Cool tanks/drums with water spray/remove them into safety. Dilute toxic gases with water

spray.

Protection during firefighting : Heat/fire exposure: self-contained breathing apparatus (EN 136 + EN 137).

# **SECTION 6: Accidental release measures**

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

# 6.1.1. For non-emergency personnel

Protective equipment : Gloves (EN 374). Protective clothing (EN 14605 or EN 13034). Dust cloud production: self-

contained breathing apparatus (EN 136 + EN 137).

Emergency procedures : Mark the danger area. Prevent dust cloud formation, e.g. by wetting. No naked flames.

Wash contaminated clothes. In case of hazardous reactions: keep upwind. In case of reactivity hazard: consider evacuation.

Measures in case of dust release : In case of dust production: keep upwind. Dust production: have neighbourhood close doors

and windows

### 6.1.2. For emergency responders

No additional information available

### 6.2. Environmental precautions

No additional information available

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

For containment : Contain released product, collect/pump into suitable containers. Plug the leak, cut off the

supply. Knock down/dilute dust cloud with water spray. Powdered form: no compressed air for pumping over spills. If reacting: dilute toxic gas/vapour with water spray. Take account of

toxic/corrosive precipitation water.

Methods for cleaning up : Prevent dust cloud formation. Scoop solid spill into closing containers. Powdered: do not

use compressed air for pumping over spills. Wash down leftovers with plenty of water.

Wash clothing and equipment after handling.

## 6.4. Reference to other sections

No additional information available

# **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

Precautions for safe handling : Avoid raising dust. Take precautions against electrostatic charges. Keep away from naked

flames/heat. In finely divided state: use spark-/explosionproof appliances. Finely divided: keep away from ignition sources/sparks. Carry operations in the open/under local exhaust/ventilation or with respiratory protection. Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Thoroughly clean/dry the installation before use. Powdered form: no compressed air for pumping over.

Keep container tightly closed.

Hygiene measures : Observe normal hygiene standards.

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

Heat and ignition sources : KEEP SUBSTANCE AWAY FROM: heat sources. ignition sources.

Information on mixed storage : KEEP SUBSTANCE AWAY FROM: combustible materials. oxidizing agents. (strong) acids.

(strong) bases. water/moisture.

Storage area : Store in a dry area. Keep container in a well-ventilated place. Provide the tank with earthing.

Limited time of storage. Meet the legal requirements.

Special rules on packaging : SPECIAL REQUIREMENTS: hermetical. watertight. dry. correctly labelled. meet the legal

requirements. Secure fragile packagings in solid containers.

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Packaging materials : SUITABLE MATERIAL: glass. cardboard. plastics. MATERIAL TO AVOID: metal. steel.

# 7.3. Specific end use(s)

No additional information available

# SECTION 8: Exposure controls/personal protection

# 8.1. Control parameters

### 8.1.1 National occupational exposure and biological limit values

No additional information available

### 8.1.2. Recommended monitoring procedures

No additional information available

### 8.1.3. Air contaminants formed

No additional information available

# 8.1.4. DNEL and PNEC

Ammonium acetate, eluent additive for LC-MS (631-61-8)		
DNEL/DMEL (Workers)		
Acute - systemic effects, dermal	62.04 mg/kg bw/day	
Acute - systemic effects, inhalation	5469.35 mg/m³	
Long-term - systemic effects, dermal	10.34 mg/kg bw/day	
Long-term - systemic effects, inhalation	911.56 mg/m³	
DNEL/DMEL (General population)		
Acute - systemic effects, dermal	31.02 mg/kg bw/day	
Acute - systemic effects, inhalation	2674.16 mg/m³	
Acute - systemic effects, oral	31.02 mg/kg bw/day	
Long-term - systemic effects,oral	5.17 mg/kg bw/day	
Long-term - systemic effects, inhalation	449.56 mg/m³	
Long-term - systemic effects, dermal	5.17 mg/kg bw/day	
PNEC (Water)		
PNEC aqua (freshwater)	3.08 mg/l	
PNEC aqua (marine water)	0.308 mg/l	
PNEC (Sediment)		
PNEC sediment (freshwater)	2.51 mg/kg dwt	
PNEC sediment (marine water)	0.251 mg/kg dwt	
PNEC (Soil)		
PNEC soil	0.72 mg/kg dwt	
PNEC (STP)		
PNEC sewage treatment plant	677 mg/l	

## 8.1.5. Control banding

No additional information available

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# 8.2. Exposure controls

### 8.2.1. Appropriate engineering controls

No additional information available

### 8.2.2. Personal protection equipment

### Personal protective equipment symbol(s):







### 8.2.2.1. Eye and face protection

#### Eye protection:

Safety glasses (EN 166). In case of dust production: protective goggles (EN 166)

### 8.2.2.2. Skin protection

### Skin and body protection:

Protective clothing (EN 14605 or EN 13034)

#### Hand protection:

Gloves

### Other skin protection

### Materials for protective clothing:

Excellent resistance: Natural rubber. Nitrile rubber. neoprene/natural rubber

### 8.2.2.3. Respiratory protection

## Respiratory protection:

Dust production: dust mask with filter type P1

## 8.2.2.4. Thermal hazards

Viscosity, kinematic

No additional information available

## 8.2.3. Environmental exposure controls

No additional information available

# **SECTION 9: Physical and chemical properties**

# 9.1. Information on basic physical and chemical properties

Physical state : Solid

Colour : Colourless to white.

Appearance : Crystalline solid. Grains.

Molecular mass : 77.08 g/mol

Odour : Mild odour. Vinegar odour.

Odour threshold Not available Melting point 114 °C Freezing point Not available Boiling point : Not applicable Flammability Not available **Explosive limits** Not applicable Lower explosion limit : Not applicable : Not applicable Upper explosion limit Flash point : Not applicable (solid) Auto-ignition temperature : Not applicable Decomposition temperature : Not available : 6.7 - 7.3 (5%)pН pH solution : Not available

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: Not applicable

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Solubility : Soluble in water, Soluble in ethanol, Soluble in methanol,

Water: 148 g/100ml (4 °C)

Partition coefficient n-octanol/water (Log Kow) : Not available

Partition coefficient n-octanol/water (Log Pow) -2.79 (Calculated, KOWWIN)

0.00019 hPa (25 °C, MPBPWin v1.43, EpiSuite) Vapour pressure

Vapour pressure at 50°C Not available Density 1170 kg/m<sup>3</sup>

Relative density 1.2

Relative vapour density at 20°C : Not applicable Particle size Not available

### 9.2. Other information

# 9.2.1. Information with regard to physical hazard classes

No additional information available

## 9.2.2. Other safety characteristics

Other properties : Hygroscopic, Neutral reaction

# **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

Decomposes on exposure to (strong) oxidizers: release of heat.

### 10.2. Chemical stability

Hygroscopic.

# 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

No additional information available

# 10.5. Incompatible materials

No additional information available

# 10.6. Hazardous decomposition products

Reacts violently with (some) acids: release of corrosive gases/vapours (acetic acid vapours). Reacts violently with (some) bases: release of corrosive gases/vapours (ammonia). Decomposes on exposure to temperature rise: release of toxic and corrosive gases/vapours (ammonia, acetic acid vapours).

# **SECTION 11: Toxicological information**

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

Acute toxicity (oral) : Not classified Acute toxicity (dermal) : Not classified Acute toxicity (inhalation) : Not classified Skin corrosion/irritation : Not classified

pH: 6.7 - 7.3 (5 %)

Serious eye damage/irritation : Not classified

pH: 6.7 - 7.3 (5 %)

Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified Reproductive toxicity : Not classified : Not classified STOT-single exposure STOT-repeated exposure : Not classified

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Aspiration hazard : Not classified

### 11.2. Information on other hazards

No additional information available

# **SECTION 12: Ecological information**

# 12.1. Toxicity

Ecology - general : Not classified as dangerous for the environment according to the criteria of Regulation (EC)

No 1272/2008

Ecology - air : Not included in the list of substances which may contribute to the greenhouse effect (IPCC).

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014). Not

classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).

Ecology - water : Harmful to aquatic organisms. Slightly harmful to fishes. Mild water pollutant (surface

water). May cause eutrophication.

Hazardous to the aquatic environment, short-term

(acute)

Hazardous to the aquatic environment, long-term

(chronic)

Not rapidly degradable

: Not classified: Not classified

Ammonium acetate, eluent additive for LC-MS (631-61-8)

LC50 - Fish [1]

308 mg/l (OECD 203: Fish, Acute Toxicity Test, 48 h, Cyprinus carpio, Semi-static system, Fresh water, Experimental value, Lethal)

EC50 - Crustacea [1]

> 1000 mg/l (EU Method C.2, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)

> 1000 mg/l (ISO 10253, Skeletonema costatum, Salt water, Experimental value, Growth rate)

### 12.2. Persistence and degradability

Ammonium acetate, eluent additive for LC-MS (631-61-8)		
Persistence and degradability Readily biodegradable in water.		
Biochemical oxygen demand (BOD)	0.65 g O <sub>2</sub> /g substance	
ThOD	0.83 g O <sub>2</sub> /g substance	
BOD (% of ThOD)	0.79 (5 day(s), Literature study)	

### 12.3. Bioaccumulative potential

Ammonium acetate, eluent additive for LC-MS (631-61-8)	
BCF - Fish [1] 3.162 (BCFBAF v3.00, Calculated value)	
Partition coefficient n-octanol/water (Log Pow)	-2.79 (Calculated, KOWWIN)
Bioaccumulative potential	Not bioaccumulative.

# 12.4. Mobility in soil

mmonium acetate, eluent additive for LC-MS (631-61-8)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.179 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil.

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# 12.5. Results of PBT and vPvB assessment

# Ammonium acetate, eluent additive for LC-MS (631-61-8)

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

# 12.6. Endocrine disrupting properties

No additional information available

# 12.7. Other adverse effects

No additional information available

# **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

Product/Packaging disposal recommendations

: Do not discharge into surface water. Recycle/reuse. Remove to an authorized incinerator with energy recovery.

Additional information

: Can be considered as non hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.

European List of Waste (LoW) code

15 01 01 - paper and cardboard packaging

15 01 02 - plastic packaging

15 01 07 - glass packaging

06 03 99 - wastes not otherwise specified

# **SECTION 14: Transport information**

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID		
4.1. UN number or ID number						
Not applicable	Not applicable	Not applicable	Not applicable Not applicable			
4.2. UN proper shippin	g name					
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable		
4.3. Transport hazard o	class(es)					
Not applicable	Not applicable	Not applicable	Not applicable Not applicable			
4.4. Packing group						
Not applicable	Not applicable	Not applicable	Not applicable Not applicable			
4.5. Environmental haz	ards					
Not applicable	Not applicable	Not applicable	Not applicable Not applicable			
o supplementary informatio	n available					

# 14.6. Special precautions for user

## **Overland transport**

Not applicable

### Transport by sea

Not applicable

# Air transport

Not applicable

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#### Inland waterway transport

Not applicable

#### Rail transport

Not applicable

# 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

### 15.1.1. EU-Regulations

### **REACH Annex XVII (Restriction List)**

Not listed on REACH Annex XVII

#### **REACH Annex XIV (Authorisation List)**

Not listed on REACH Annex XIV (Authorisation List)

### **REACH Candidate List (SVHC)**

Not listed on the REACH Candidate List

### **PIC Regulation (Prior Informed Consent)**

Not listed on the PIC list (Regulation EU 649/2012)

### **POP Regulation (Persistent Organic Pollutants)**

Not listed on the POP list (Regulation EU 2019/1021)

## Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

### **Explosives Precursors Regulation (2019/1148)**

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

### **Drug Precursors Regulation (273/2004)**

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

### 15.1.2. National regulations

# Germany

Employment restrictions

Observe restrictions according Act on the Protection of Working Mothers (MuSchG). Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG).

Water hazard class (WGK) Storage class (LGK, TRGS 510) Joint storage table : WGK 1, Slightly hazardous to water (Classification according to AwSV; ID No. 2611).

: LGK 13 - Non-combustible solids.

LGK 1 LGK 2A LGK 2B LGK 3 **LGK 4.1A** LGK 4.1B LGK 4.2 LGK 4.3 LGK 5.1A LGK 5.1B LGK 5.1C LGK 5.2 **LGK 6.1A LGK 6.1B** LGK 6.1C LGK 6.1D LGK 6.2 LGK 7 LGK 8A LGK 8B LGK 10 LGK 11 LGK 12 **LGK 13** LGK 10-13

Joint storage not permitted for

Joint storage with restrictions permitted for

Joint storage permitted for

: LGK 1, LGK 6.2, LGK 7. : LGK 4.1A, LGK 5.1C.

LGK 2A, LGK 2B, LGK 3, LGK 4.1B, LGK 4.2, LGK 4.3, LGK 5.1A, LGK 5.1B, LGK 5.2, LGK 6.1A, LGK 6.1B, LGK 6.1C, LGK 6.1D, LGK 8A, LGK 8B, LGK 10, LGK 11, LGK 12,

LGK 13, LGK 10-13.

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

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Technical Instructions on Air Quality Control (TA : 5.2.1 Total Dust, including Micro Dust.

Luft)

**Netherlands** 

ABM category : B(3) - hazardous for aquatic organisms

SZW-lijst van kankerverwekkende stoffen : The substance is not listed SZW-lijst van mutagene stoffen : The substance is not listed SZW-lijst van reprotoxische stoffen – Borstvoeding : The substance is not listed SZW-lijst van reprotoxische stoffen – : The substance is not listed

Vruchtbaarheid

SZW-lijst van reprotoxische stoffen – Ontwikkeling : The substance is not listed

**Switzerland** 

Storage class (LK) : NG - Non-hazardous

### 15.2. Chemical safety assessment

No additional information available

# **SECTION 16: Other information**

### No additional information available

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.