

Creation Date Oct-2013 Revision Date Oct-2018 Revision Number 2

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE

COMPANY/UNDERTAKING

1.1. Product identifier

Product Description: <u>Acetic acid, ammonium salt</u>

Product Grade: ER, SQ, HPLC

Cat No.: Q11145, Q21335, Q1114E, Q11155, Q2133E

Synonyms Ammonium acetate

 CAS-No
 631-61-8

 EC-No.
 211-162-9

 Molecular Formula
 C2 H7 N O2

 Reach Registration Number
 01-2119828440-45

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

Recommended Use Laboratory chemicals

Sector of use SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites

Product category PC21 - Laboratory chemicals

Process categories PROC15 - Use as a laboratory reagent

Environmental release category ERC6a - Industrial use resulting in manufacture of another substance (use of intermediates)

Uses advised against No Information available

1.3. Details of the supplier of the safety data sheet

Company Thermo Fisher Scientific India Pvt. Ltd

403-404, B-wing, Delphi, Hiranandani Business Park,

Powai, Mumbai 400076, INDIA.

E-mail address laboratorysolutions@thermofisher.com

1.4. Emergency telephone number

India Toll Free: 18 00 22 22 30 Chemtrec US: (800) 424-9300 Chemtrec EU: 001 (202) 483-7616

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLP Classification - Regulation (EC) No 1272/2008

Not hazardous

Physical hazards

Based on available data, the classification criteria are not met

Health hazards

Based on available data, the classification criteria are not met

Environmental hazards

Based on available data, the classification criteria are not met

Classification according to EU Directives 67/548/EEC or 1999/45/EC

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SECTION 2: HAZARDS IDENTIFICATION

R-phrase(s) none

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

2.2. Label elements

Signal Word None

Hazard Statements

Precautionary Statements

2.3. Other hazards

Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (vPvB) No information available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Component	CAS-No	EC-No.	Weight %	CLP Classification - Regulation (EC) No 1272/2008	DSD Classification - 67/548/EEC
Ammonium acetate	631-61-8	EEC No. 211-162-9	>95	-	-

Reach Registration Number	01-2119828440-45

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain

medical attention.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Get medical attention

immediately if symptoms occur.

Ingestion Do not induce vomiting. Obtain medical attention.

Inhalation Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if

symptoms occur.

Protection of First-aidersNo special precautions required.

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

No information available

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

Notes to Physician Treat symptomatically

SECTION 5: FIREFIGHTING MEASURES

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SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

Extinguishing media which must not be used for safety reasons

No information available.

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors

Hazardous Combustion Products

Nitrogen oxides (NOx), Ammonia.

5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation.

6.2. Environmental precautions

Should not be released into the environment.

6.3. Methods and material for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.

6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Wear personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. Avoid dust formation.

7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

Use in laboratories

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

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Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.

MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust

Workers

Derived No Effect Level (DNEL)

Route of exposure	Acute effects (local)	Acute effects (systemic)	Chronic effects (local)	Chronic effects (systemic)
Oral				
Dermal		62.04 mg/kg		10.34 mg/kg
Inhalation		5469.35 mg/m ³		911.56 mg/m ³

Predicted No Effect Concentration (PNEC)

No information available.

8.2. Exposure controls

Engineering Measures

None under normal use conditions..

Personal protective equipment

Eye Protection Safety glasses with side-shields (European standard - EN 166)

Hand Protection Protective gloves

Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
Natural rubber Nitrile rubber Neoprene PVC	See manufacturers recommendations	-	EN 374	(minimum requirement)

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. Remove gloves with care avoiding skin contamination.

Skin and body protection	Wear appropriate protective gloves and clothing to prevent skin exposure
Respiratory Protection	No protective equipment is needed under normal use conditions.
Large scale/emergency use	Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced Recommended Filter type: Particle filter.
Small scale/Laboratory use	Maintain adequate ventilation Recommended half mask:- Particle filtering: EN149:2001
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice
Environmental exposure controls	No information available.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Solid

9.1. Information on basic physical and chemical properties

White **Appearance Physical State** Solid.

Odor Ammonia-like No data available **Odor Threshold**

7.0 5 % solution (20°C) Ηq

114°C / 237.2°F Melting Point/Range **Softening Point** No data available

Boiling Point/Range No information available.

Flash Point 136°C / 276.8°F Method - No information available.

Evaporation Rate Not applicable Solid

No information available. Flammability (solid,gas) No data available.

Explosion Limits

Vapor Pressure No data available

Vapor Density Not applicable

Specific Gravity / Density No data available **Bulk Density** No data available 1480 g/L (20°C) **Water Solubility**

Solubility in other solvents No information available.

Partition Coefficient (n-Component log Pow octanol/water) Ammonium acetate -2.79

Autoignition Temperature Not applicable No data available **Decomposition temperature**

Solid Not applicable **Viscosity**

No information available. **Explosive Properties Oxidizing Properties** No information available.

9.2. Other information

Molecular Formula C2 H7 N O2 **Molecular Weight** 77.08

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity None known, based on information available.

10.2. Chemical stability Hygroscopic.

10.3. Possibility of hazardous reactions

Hazardous Polymerization Hazardous polymerization does not occur.

None under normal processing. **Hazardous Reactions** 10.4. Conditions to avoid

Incompatible products, Excess heat, Avoid dust formation, Exposure to moisture.

10.5. Incompatible materials Strong oxidizing agents. Strong acids. Strong bases, sodium hypochlorite.

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10.6. Hazardous decomposition products

Nitrogen oxides (NOx), Ammonia.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Product Information See actual entry in RTECS for complete information.

(a) acute toxicity;

Oral Based on available data, the classification criteria are not met Based on available data, the classification criteria are not met **Dermal** Inhalation Based on available data, the classification criteria are not met

Based on available data, the classification criteria are not met (b) skin corrosion/irritation;

(c) serious eye damage/irritation; Based on available data, the classification criteria are not met

(d) respiratory or skin sensitization;

Respiratory Based on available data, the classification criteria are not met Skin Based on available data, the classification criteria are not met

(e) germ cell mutagenicity; Based on available data, the classification criteria are not met

Based on available data, the classification criteria are not met (f) carcinogenicity;

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; Based on available data, the classification criteria are not met (h) STOT-single exposure; Based on available data, the classification criteria are not met

(i) STOT-repeated exposure; Based on available data, the classification criteria are not met

Target Organs None known. (j) aspiration hazard; Not applicable

Solid

Other Adverse Effects See actual entry in RTECS for complete information The toxicological properties have not been

fully investigated.

Symptoms / effects, No information available.

both acute and delayed

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity effects Do not empty into drains.

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
Ammonium acetate	Mosquito Fish: 238			
	mg/L/24H			
	Carp: 1.06 mg/L/48H			

12.2. Persistence and degradability

Readily biodegradable

Persistence Soluble in water, Persistence is unlikely, based on information available.

Degradability Not relevant for inorganic substances.

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12.3. Bioaccumulative potential Bioaccumulation is unlikely

Component	log Pow	Bioconcentration factor (BCF)
Ammonium acetate	-2.79	No data available

The product is water soluble, and may spread in water systems. . Will likely be mobile in the 12.4. Mobility in soil

environment due to its water solubility. Highly mobile in soils.

12.5. Results of PBT and vPvB

assessment

Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and

very bioaccumulative (vPvB).

12.6. Other adverse effects

Endocrine Disruptor Information Persistent Organic Pollutant Ozone Depletion Potential

This product does not contain any known or suspected endocrine disruptors

This product does not contain any known or suspected substance This product does not contain any known or suspected substance

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues / Unused

Products

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Consult local, regional, and national hazardous waste regulations to ensure

complete and accurate classification.

Contaminated Packaging Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use

empty containers.

European Waste Catalogue (EWC)

According to the European Waste Catalogue, Waste Codes are not product specific, but

application specific

Other Information

Waste codes should be assigned by the user based on the application for which the product

was used

SECTION 14: TRANSPORT INFORMATION

IMDG/IMO Not regulated

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

ADR Not regulated

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

Not regulated IATA

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

No hazards identified 14.5. Environmental hazards

14.6. Special precautions for user

14.7. Transport in bulk according to

Annex II of MARPOL73/78 and the

No special precautions required Not applicable, packaged goods

IBC Code

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SECTION 15: REGULATORY INFORMATION

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

International Inventories X = listed

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
Ammonium acetate	211-162-9	-		X	Х	-	X	X	X	Χ	Χ

National Regulations

WGK Classification Water contaminating class (Germany): Hazardous to water/Class 1

Component	Germany - Water Classification (VwVwS)	Germany - TA-Luft Class
Ammonium acetate	WGK 1	

Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

Take note of Dir 94/33/EC on the protection of young people at work

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

15.2. Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) has not been conducted

SECTION 16: OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3

Not applicable

CAS - Chemical Abstracts Service

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Existing and Evaluated Chemical Substances

WEL - Workplace Exposure Limit

ACGIH - American Conference of Industrial Hygiene

DNEL - Derived No Effect Level

RPE - Respiratory Protective Equipment

LC50 - Lethal Concentration 50%

NOEC - No Observed Effect Concentration

PBT - Persistent, Bioaccumulative, Toxic

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code

OECD - Organisation for Economic Co-operation and Development

BCF - Bioconcentration factor

Key literature references and sources for data

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic

Substances List

ENCS - Japan Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

PNEC - Predicted No Effect Concentration

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50%

POW - Partition coefficient Octanol:Water

vPvB - very Persistent, very Bioaccumulative

ICAO/IATA - International Civil Aviation Organization/International Air Transport Association

 $\mbox{\bf MARPOL}$ - International Convention for the Prevention of Pollution from Ships

ATE - Acute Toxicity Estimate

VOC - Volatile Organic Compounds

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Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

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Revision Summary SDS section 1 updated and update of Format

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

Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet