

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

1.1 Product identifier

Trade name: **Standardlösung Ammoniumnitrat**

Synonym: *Standard solution ammonium nitrate*

Article number: CAY40-1A1A

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

Product category PC21 *Laboratory chemicals*

Application of the substance / the mixture *Laboratory chemicals*

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Endress+Hauser

Conducta GmbH+Co. KG

Dieselstraße 24

D-70839 Gerlingen

Further information obtainable from:

Phone: +49 (0)7156 209-10117

E-Mail: MSDS.PCC@endress.com

1.4 Emergency telephone number:

00353 01 809 2166 (from 8 am to 10 pm, 7 days a week)

00353 01 809 2566 (24h)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

The product is not classified, according to the CLP regulation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 *Void*

Hazard pictograms *Void*

Signal word *Void*

Hazard statements *Void*

Additional information:

Product contains: Reportable explosives precursors. Making available, introduction, possession and use according to Regulation (EU) 2019/1148, Article 9.

2.3 Other hazards

The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

Results of PBT and vPvB assessment

PBT: *Not applicable.*

vPvB: *Not applicable.*

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: *Mixture of substances listed below with nonhazardous additions.*


Dangerous components:

CAS: 6484-52-2

EINECS: 229-347-8

Registration number: 01-2119490981-27-XXXX

ammonium nitrate

 Ox. Sol. 1, H271

5-10%

Additional information: *For the wording of the listed hazard phrases refer to section 16.*

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*** SECTION 4: First aid measures****4.1 Description of first aid measures**

After inhalation: *Supply fresh air; consult doctor in case of complaints.*

After skin contact: *Generally the product does not irritate the skin.*

After eye contact: *Rinse opened eye for several minutes under running water.*

After swallowing: *Rinse out mouth and then drink plenty of water.*

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:**

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

For safety reasons unsuitable extinguishing agents: *no further information*

5.2 Special hazards arising from the substance or mixture *No further relevant information available.***5.3 Advice for firefighters** *No further relevant information available.*

Protective equipment: *No special measures required.*

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures** *Wear protective clothing.***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).

6.4 Reference to other sections

No dangerous substances are released.

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** *No special precautions are necessary if used correctly.*

Information about fire - and explosion protection: *No special measures required.*

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: *None.*

Storage class: 12

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

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SECTION 8: Exposure controls/personal protection**8.1 Control parameters****Ingredients with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: *The lists valid during the making were used as basis.*

8.2 Exposure controls

Appropriate engineering controls *No further data; see item 7.*

Individual protection measures, such as personal protective equipment

General protective and hygienic measures: *Wash hands before breaks and at the end of work.*

Respiratory protection: *Not required.*

Hand protection

Protective gloves and protective skin cream

To avoid skin problems reduce the wearing of gloves to the required minimum.

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

No chemical-protective gloves required.

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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

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/face protection *Goggles recommended during refilling*

Body protection: *Protective work clothing*

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties****General Information**

Physical state	<i>Fluid</i>
Colour:	<i>Colourless</i>
Odour:	<i>Odourless</i>
Odour threshold:	<i>Not determined.</i>
Melting point/freezing point:	<i>Undetermined.</i>
Boiling point or initial boiling point and boiling range	<i>100 °C</i>
Flammability	<i>Not applicable.</i>
Lower and upper explosion limit	
Lower:	<i>Not determined.</i>
Upper:	<i>Not determined.</i>
Flash point:	<i>Not applicable.</i>
Decomposition temperature:	<i>Not determined.</i>
pH	<i>Not determined.</i>
Viscosity:	
Kinematic viscosity	<i>Not determined.</i>
Dynamic:	<i>Not determined.</i>
Solubility	
water:	<i>Fully miscible.</i>
Partition coefficient n-octanol/water (log value)	<i>Not determined.</i>
Vapour pressure at 20 °C:	<i>23 hPa</i>

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Density and/or relative density

Density at 20 °C:	1.039 g/cm ³
Relative density	Not determined.
Vapour density	Not determined.

9.2 Other information**Appearance:**

Form: Fluid

Important information on protection of health and environment, and on safety.**Auto-ignition temperature:**

Product is not selfigniting.

Explosive properties:

Product does not present an explosion hazard.
Not determined.

Solvent content:

Water: >90.0 %

Solids content: 0.0 %

Change in condition

Evaporation rate: Not determined.

Information with regard to physical hazard classes

Explosives: Void

Flammable gases: Void

Aerosols: Void

Oxidising gases: Void

Gases under pressure: Void

Flammable liquids: Void

Flammable solids: Void

Self-reactive substances and mixtures: Void

Pyrophoric liquids: Void

Pyrophoric solids: Void

Self-heating substances and mixtures: Void

Substances and mixtures, which emit flammable gases in contact with water: Void

Oxidising liquids: Void

Oxidising solids: Void

Organic peroxides: Void

Corrosive to metals: Void

Desensitised explosives: Void

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 hazard classes as defined in Regulation (EC) No 1272/2008**

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

LD/LC50 values relevant for classification:

CAS: 6484-52-2 ammonium nitrate

Oral	LD50	2,217 mg/kg (rat)
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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.**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.**11.2 Information on other hazards****Endocrine disrupting properties**

None of the ingredients is listed.

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.**12.5 Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

12.7 Other adverse effects**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.

*** 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.

European waste catalogue

16 05 09 | discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08

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****14.1 UN number or ID number**

ADR, ADN, IMDG, IATA Void

14.2 UN proper shipping name

ADR, ADN, IMDG, IATA Void

14.3 Transport hazard class(es)

ADR, ADN, IMDG, IATA

Class Void

14.4 Packing group

ADR, IMDG, IATA Void

14.5 Environmental hazards: Not applicable.

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14.6 Special precautions for user *Not applicable.*
 14.7 Maritime transport in bulk according to IMO instruments *Not applicable.*
 UN "Model Regulation": *Void*

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
 Labelling according to Regulation (EC) No 1272/2008 *Void*

Hazard pictograms *Void*Signal word *Void*Hazard statements *Void*

Directive 2012/18/EU

Named dangerous substances - ANNEX I *None of the ingredients is listed.*REGULATION (EC) No 1907/2006 ANNEX XVII *Conditions of restriction: 65*

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

<i>None of the ingredients is listed.</i>

REGULATION (EU) 2019/1148

Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

<i>None of the ingredients is listed.</i>

Annex II - REPORTABLE EXPLOSIVES PRECURSORS
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<i>None of the ingredients is listed.</i>

Regulation (EC) No 273/2004 on drug precursors

<i>None of the ingredients is listed.</i>

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

<i>None of the ingredients is listed.</i>

National regulations:

Waterhazard class: *Water hazard class 1 (Self-assessment): slightly hazardous for water.*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.

16.1 Relevant phrases

H271 May cause fire or explosion; strong oxidiser.

16.3 Recommended restriction of use

Department issuing SDS: *PCC-TWR*Contact: *MSDS.pcc@endress.com*Date of previous version: *19.05.2021*Version number of previous version: *2*

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)**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**PBT: Persistent, Bioaccumulative and Toxic*

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Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 31.03.2022

Version 3 (replaces version 2)

Revision: 31.03.2022

Trade name: Standardlösung Ammoniumnitrat

vPvB: very Persistent and very Bioaccumulative

Ox. Sol. 1: Oxidizing solids – Category 1

*** Data compared to the previous version altered.**

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