

## \* 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: 00356 21 22 40 71

## \* 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<br>EINECS: 229-347-8<br>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.*

## \* SECTION 4: First aid measures

### 4.1 Description of first aid measures

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

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**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.*

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**SECTION 5: Firefighting measures****5.1 Extinguishing media****Suitable extinguishing agents:**

*CO<sub>2</sub>, 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.*

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**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.*

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**\* 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 section 7.*

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**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.***Eyeface 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                                           | Fluid                   |
| Colour:                                                  | Colourless              |
| Odour:                                                   | Odourless               |
| Odour threshold:                                         | Not determined.         |
| Melting point/freezing point:                            | Undetermined.           |
| Boiling point or initial boiling point and boiling range | 100 °C                  |
| Flammability                                             | Not applicable.         |
| Lower and upper explosion limit                          |                         |
| Lower:                                                   | Not determined.         |
| Upper:                                                   | Not determined.         |
| Flash point:                                             | Not applicable.         |
| Decomposition temperature:                               | Not determined.         |
| pH                                                       | Not determined.         |
| Viscosity:                                               |                         |
| Kinematic viscosity                                      | Not determined.         |
| Dynamic:                                                 | Not determined.         |
| Solubility                                               |                         |
| water:                                                   | Fully miscible.         |
| Partition coefficient n-octanol/water (log value)        | Not determined.         |
| Vapour pressure at 20 °C:                                | 23 hPa                  |
| Density and/or relative density                          |                         |
| Density at 20 °C:                                        | 1.039 g/cm <sup>3</sup> |
| Relative density                                         | Not determined.         |
| Vapour density                                           | Not determined.         |

**9.2 Other information****Appearance:****Form:** Fluid

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**Important information on protection of health and environment, and on safety.**

Ignition temperature:

*Product is not selfigniting.*

Explosive properties:

*Product does not present an explosion hazard.**Not determined.*

Solvent content:

Water:

&gt;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)

**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.*

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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.***14.6 Special precautions for user***Not applicable.***14.7 Maritime transport in bulk according to IMO instruments***Not applicable.*

UN "Model Regulation":

Void

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**\* 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***None of the ingredients is listed.***REGULATION (EU) 2019/1148****Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))***None of the ingredients is listed.***Annex II - REPORTABLE EXPLOSIVES PRECURSORS***None of the ingredients is listed.***Regulation (EC) No 273/2004 on drug precursors***None of the ingredients is listed.***Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors***None of the ingredients is listed.***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.***16.3 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**vPvB: very Persistent and very Bioaccumulative**Ox. Sol. 1: Oxidizing solids – Category 1***\* Data compared to the previous version altered.**