in accordance with SANS

Printing date 30.03.2022

Endress+Hauser 🖪

People for Process Automation Version 18 (replaces version 17)

Revision: 30.03.2022

SECTION 1: Identification of the substance or mixture and of the supplier

Product identifier

Trade name: <u>Standard solution NH4-N</u> <u>5 mg/l</u>

Article number: CAY142V10C05AAE

Recommended use of the chemical and restrictions on use No further relevant information available.

Application of the substance / the mixture Laboratory chemicals

Supplier's details 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

Emergency phone number +27 (0)861 555 777

SECTION 2: Hazard identification

Classification of the substance or mixture *The product is not classified, according to the Globally Harmonised System (GHS).*

GHS label elements GHS label elements Void Hazard pictograms Void Signal word Void Hazard statements Void 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 or information on ingredients

Mixtures Description: aqueous solution

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

SECTION 4: First-aid measures

Description of necessary first-aid measures

General information: No special measures required.

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: If symptoms persist consult doctor.

Most important symptoms or effects, acute and delayed No further relevant information available.

in accordance with SANS

Printing date 30.03.2022

Revision: 30.03.2022

Trade name: Standard solution NH4-N

(Contd. of page 1)

Page 2/5

Indication of immediate medical attention and special treatment needed, if necessary No further relevant information available.

SECTION 5: Fire-fighting measures

Suitable 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 Specific hazards arising from the chemical No further relevant information available. Special protective actions for fire fighters No further relevant information available. Protective equipment: No special measures required.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures Wear protective clothing. Environmental precautions: Dilute with plenty of water. Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). 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

Precautions for safe handling *No special measures required.* **Information about fire - and explosion protection:** *No special measures required.*

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

SECTION 8: Exposure controls or personal protection

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.

Exposure controls

Appropriate engineering controls *No further data; see item 7.* Individual protection measures, such as personal protective equipment (PPE)

General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Respiratory protection: Not required.

Hand protection 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

in accordance with SANS

Printing date 30.03.2022

Version 18 (replaces version 17)

Revision: 30.03.2022

Trade name: Standard solution NH4-N

checked prior to the application.

Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye or face protection Not required.

Body protection: Protective work clothing

SECTION 9: Physical and chemical properties

Information on basic physical and chemical pro	perties
General Information	
Physical state	Fluid
Colour:	Colourless
Odour:	Odourless
Odour threshold:	Not determined.
Melting point/freezing point:	0 °C
نقطة الغليان أو نقطة الغليان الأولية ونطاق الغليان	100 °C
Flammability	Not applicable.
Upper or lower flammability or explosive limits	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	Not applicable.
Decomposition temperature:	Not determined.
pH at 20 °C	4-6
	4-0
Viscosity:	Not datarminad
Viscosity	Not determined.
Dynamic:	Not determined.
Solubility	
water:	Fully miscible.
Partition coefficient: n-octanol or water	Not determined.
Vapour pressure at 20 °C:	23 hPa
Vapour density + Relative density	
Density at 20 °C:	1 g/cm ³
Relative density	Not determined.
Vapour density	Not determined.
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:	100.0 %
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
	(Contd. on

(Contd. of page 2)

(Contd. on page 4)

in accordance with SANS

Printing date 30.03.2022

Page 4/5

Trade name: Standard solution NH4-N

		(Contd. of page 3)
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 flamm	able	
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

Reactivity No further relevant information available. Chemical stability Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications. Possibility of hazardous reactions No dangerous reactions known. Conditions to avoid No further relevant information available. Incompatible materials: No further relevant information available. Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

Information on other hazards

endocrine disrupting potential

None of the ingredients is listed.

SECTION 12: Ecological information

Toxicity

Aquatic toxicity: No further relevant information available. Persistence and degradability No further relevant information available. Bioaccumulative potential No further relevant information available. Mobility in soil No further relevant information available. Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable. Endocrine disrupting properties The product does not contain substances with endocrine disrupting properties. Other adverse effects Additional ecological information: General notes: Not hazardous for water.

SECTION 13: Disposal considerations

Waste treatment methods

Recommendation Smaller quantities can be disposed of with household waste.

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations. **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

(Contd. on page 5)

in accordance with SANS *Printing date 30.03.2022*

Revision: 30.03.2022

Trade name: Standard solution NH4-N

(Contd. of page 4)

SECTION 14: Transport information		
UN number ADN, IMDG, IATA	Void	
UN proper shipping name ADR, ADN, IMDG, IATA Transport hazard class(es)	Void	
ADR, ADN, IMDG, IATA Class Packing group	Void	
ADR, IMDG, IATA Environmental hazards:	Void	
Marine pollutant: Special precautions for user	No Not applicable.	
Transport in bulk according to Annex II o MARPOL 73/78 and the IBC Code	n Not applicable.	
Transport/Additional information: UN "Model Regulation":	Not dangerous according to the above specifications. Void	

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question GHS label elements *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. **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.

Department issuing SDS: *PCC-TWR*

Contact: *MSDS.pcc*@endress.com

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO: International Civil Aviation Organisation ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO) 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

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)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

* Data compared to the previous version altered.