

1 Identification

Product identifier

Trade name: Standard solution Mn

Synonym: 500 µg/L

Article number: CAY845V10C50AAE

Application of the substance / the mixture *Laboratory chemicals*

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*

Emergency telephone number: +1 604 682 5050

2 Hazard identification

Classification of the substance or mixture

The product is not classified, according to the Globally Harmonised System (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.

3 Composition/Information on ingredients

Chemical characterisation: Mixtures

Description: *aqueous solution*

Dangerous components: *Void*

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

4 First-aid measures

Description of 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.*

Information for doctor:

Most important symptoms and effects, both acute and delayed

No further relevant information available.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

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*** 5 Fire-fighting measures****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***Special hazards arising from the substance or mixture** *No further relevant information available.***Advice for firefighters** *No further relevant information available.***Protective equipment:** *No special measures required.***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.***7 Handling and storage****Precautions for safe handling** *No special measures required.***Information about fire - and explosion protection:** *No special measures required.***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.***8 Exposure controls/ Personal protection****Additional information about design of technical facilities:** *No further data; see item 7.***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****Personal protective equipment:****General protective and hygienic measures:***The usual precautionary measures are to be adhered to when handling chemicals.***Respiratory protection:** *Not required.***Protection of hands:** *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.*

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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 protection: *Not required.*

Body protection: *Protective work clothing*

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

Form:	<i>Fluid</i>
Colour:	<i>Colourless</i>
Odour:	<i>Odourless</i>
Odour threshold:	<i>Not determined.</i>
pH-value at 20 °C:	<i>2.5-4</i>

Change in condition

Melting point/freezing point:	<i>0 °C</i>
Initial boiling point and boiling range:	<i>100 °C</i>

Flash point: *Not applicable.*

Flammability (solid, gas): *Not applicable.*

Decomposition temperature: *Not determined.*

Auto-ignition temperature: *Product is not selfigniting.*

Explosive properties: *Product does not present an explosion hazard.
Not determined.*

Explosion limits:

Lower:	<i>Not determined.</i>
Upper:	<i>Not determined.</i>

Vapour pressure at 20 °C: *23 hPa*

Density at 20 °C:	<i>1 g/cm³</i>
Relative density	<i>Not determined.</i>
Vapour density	<i>Not determined.</i>
Evaporation rate	<i>Not determined.</i>

Solubility in / Miscibility with water:

Fully miscible.

Partition coefficient: n-octanol/water: *Not determined.*

Viscosity:

Dynamic:	<i>Not determined.</i>
Kinematic:	<i>Not determined.</i>

Solvent content:

Water:	<i>100.0 %</i>
Solids content:	<i>0.0 %</i>

Other information *No further relevant information available.*

10 Stability and reactivity

Reactivity *No further relevant information available.*

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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.***11 Toxicological information****Information on toxicological effects****Acute toxicity****Primary irritant effect:****Skin corrosion/irritation** *No irritant effect.***Serious eye damage/irritation** *No irritating effect.***Respiratory or skin sensitisation** *No sensitising effects known.***Additional toxicological information:***The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.**When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.***12 Ecological information****Toxicity****Aquatic toxicity:** *No further relevant information available.***Persistence and degradability** *No further relevant information available.***Behaviour in environmental systems:****Bioaccumulative potential** *No further relevant information available.***Mobility in soil** *No further relevant information available.***Additional ecological information:****General notes:** *Not hazardous for water.***Results of PBT and vPvB assessment****PBT:** *Not applicable.***vPvB:** *Not applicable.***Other adverse effects** *No further relevant information available.***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.****14 Transport information****UN-Number****ADN, IMDG, IATA** *Void***UN proper shipping name****ADR, ADN, IMDG, IATA** *Void***Transport hazard class(es)****ADR, ADN, IMDG, IATA****Class** *Void***Packing group****ADR, IMDG, IATA** *Void*

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Environmental hazards:**Marine pollutant:** No**Special precautions for user** Not applicable.**Transport in bulk according to Annex II of
Marpol and the IBC Code** Not applicable.**Transport/Additional information:** Not dangerous according to the above specifications.**UN "Model Regulation":** Void**15 Regulatory information****Safety, health and environmental regulations/legislation specific for the substance or mixture**

No further relevant information available.

GHS label elements Void**Hazard pictograms** Void**Signal word** Void**Hazard statements** Void**Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**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***Date of the latest revision of the safety data sheet** 03/31/2022 / 1**Abbreviations and acronyms:***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)**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.**