

## 1 Identification

### Product identifier

Trade name: **Standard solution Cu**

Synonym: 1 mg/L

Article number: CAY852V10C10AAE

Application of the substance / the mixture *Laboratory chemicals*

### Details of the supplier of the safety data sheet

#### Manufacturer/Supplier:

Endress+Hauser Conducta Inc.  
4123 E. La Palma Ave., Suite 200  
Anaheim  
CA 92807-1813  
USA

#### Information department:

Phone: +49 (0)7156 209-10117  
E-Mail: MSDS.PCC@endress.com

Emergency telephone number: 001 18000 222 1222

## 2 Hazard(s) identification

### Classification of the substance or mixture

*The product is not classified, according to the Globally Harmonized System (GHS).*

#### Label elements

GHS label elements *Void*

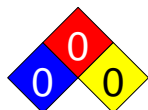
Hazard pictograms *Void*

Signal word *Void*

Hazard statements *Void*

Classification system:

NFPA ratings (scale 0 - 4)



Health = 0

Fire = 0

Reactivity = 0

HMIS-ratings (scale 0 - 4)



Health = 0

Fire = 0

Reactivity = 0

#### 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.*

## 3 Composition/information on ingredients

Chemical characterization: **Mixtures**

Description: *aqueous solution*

Dangerous components: *Void*

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

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## 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:**

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

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## 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.*

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## 7 Handling and storage

**Precautions for safe handling** *No special measures required.*

**Information about protection against explosions and fires:** *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.*

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## 8 Exposure controls/personal protection

**Additional information about design of technical systems:** *No further data; see item 7.*

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**Control parameters****Components 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 that were valid during the creation were used as basis.*

**Exposure controls****Personal protective equipment:****General protective and hygienic measures:**

*The usual precautionary measures for handling chemicals should be followed.*

**Breathing equipment:** *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.*

**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:**

<b>Form:</b>	<i>Fluid</i>
<b>Color:</b>	<i>Colorless</i>
<b>Odor:</b>	<i>Odorless</i>
<b>Odor threshold:</b>	<i>Not determined.</i>
<b>pH-value at 20 °C (68 °F):</b>	<i>3-4</i>

**Change in condition**

<b>Melting point/Melting range:</b>	<i>0 °C (32 °F)</i>
<b>Boiling point/Boiling range:</b>	<i>100 °C (212 °F)</i>

**Flash point:** *Not applicable.*

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

**Decomposition temperature:** *Not determined.*

**Auto igniting:** *Product is not selfigniting.*

**Danger of explosion:** *Product does not present an explosion hazard.  
Not determined.*

**Explosion limits:**

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

**Vapor pressure at 20 °C (68 °F):** *23 hPa (17.3 mm Hg)*

**Density at 20 °C (68 °F):** *1 g/cm<sup>3</sup> (8.345 lbs/gal)*

**Relative density** *Not determined.*

**Vapor density** *Not determined.*

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Evaporation rate	Not determined.
Solubility in / Miscibility with Water:	Fully miscible.
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Solvent content:	
Water:	100.0 %
Solids content:	0.0 %
Other information	No further relevant information available.

**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.

**11 Toxicological information**

**Information on toxicological effects**

**Acute toxicity:**

**Primary irritant effect:**  
**on the skin:** No irritant effect.  
**on the eye:** No irritating effect.

**Sensitization:** No sensitizing effects known.

**Additional toxicological information:**  
The product is not subject to classification according to internally approved calculation methods for preparations:  
When used and handled according to specifications, the product does not have any harmful effects according 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.

**Behavior 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.

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**13 Disposal considerations****Waste treatment methods****Recommendation:** *Smaller quantities can be disposed of with household waste.***Uncleaned packagings:****Recommendation:** *Disposal must be made according to official regulations.***Recommended cleansing agent:** *Water, if necessary with cleansing agents.***\*14 Transport information****UN-Number****DOT, ADN, IMDG, IATA** *Void***UN proper shipping name****DOT, ADN, IMDG, IATA** *Void***Transport hazard class(es)****DOT, ADN, IMDG, IATA****Class** *Void***Packing group****DOT, IMDG, IATA** *Void***Environmental hazards:****Marine pollutant:** *No***Special precautions for user** *Not applicable.***Transport in bulk according to Annex II of MARPOL73/78 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.***Sara****Section 355 (extremely hazardous substances):***None of the ingredient is listed.***Section 313 (Specific toxic chemical listings):**CAS: 3251-23-8 | *copper dinitrate***TSCA (Toxic Substances Control Act):***All components have the value ACTIVE.***Hazardous Air Pollutants***None of the ingredients is listed.***Proposition 65****Chemicals known to cause cancer:***None of the ingredients is listed.***Chemicals known to cause reproductive toxicity for females:***None of the ingredients is listed.***Chemicals known to cause reproductive toxicity for males:***None of the ingredients is listed.***Chemicals known to cause developmental toxicity:***None of the ingredients is listed.*

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## Carcinogenicity categories

## EPA (Environmental Protection Agency)

None of the ingredients is listed.

## TLV (Threshold Limit Value)

None of the ingredients is listed.

## MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

## NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

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 preparation / last revision 03/31/2022 / 2

## 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

DOT: US Department of Transportation

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

\* Data compared to the previous version altered.