

## 1 Identification

### Product identifier

Trade name: **Standard solution COD-O2**

Synonym: 50 mg/l

Article number: CY80COD-CC+TS

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](mailto: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*

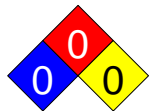
Hazard pictograms *Void*

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:** *Use fire fighting measures that suit the environment.*

**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

*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 section 7.*

### 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.*

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**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>&lt;2</i>

**Change in condition**

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

**Flash point:** *Not applicable.***Flammability:** *Not applicable.***Decomposition temperature:** *Not determined.***Ignition temperature:** *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.***Evaporation rate** *Not determined.***Solubility in / Miscibility with****Water:** *Fully miscible.***Partition coefficient (n-octanol/water):** *Not determined.*

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**Viscosity:****Dynamic:** *Not determined.***Kinematic:** *Not determined.***Solvent content:****Water:** 99.9 %**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.**Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.***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):**

CAS: 7664-93-9 | sulphuric acid

**Section 313 (Specific toxic chemical listings):**

CAS: 7664-93-9 | sulphuric acid

**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)**

CAS: 7664-93-9 | sulphuric acid

A2

**MAK (German Maximum Workplace Concentration)**

CAS: 7664-93-9 | sulphuric acid

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**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** 09/26/2024 / 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**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.**