

1 Identification

Product identifier

Trade name: **Elektrolyt COS21D-B**

Article number: 71368311

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 209-117
Fax.: +49 (0)7156 209-222
E-Mail: Service.PCC@endress.com

Emergency telephone number: 001 18000 222 1222

* 2 Hazard(s) identification

Classification of the substance or mixture



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

Label elements

GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms



GHS07

Signal word *Warning*

Hazard-determining components of labeling:

phosphoric acid

Hazard statements

Causes skin irritation.

Causes serious eye irritation.

Precautionary statements

Wear protective gloves / eye protection / face protection.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

If eye irritation persists: Get medical advice/attention.

Classification system:

NFPA ratings (scale 0 - 4)



Health = 2

Fire = 0

Reactivity = 0

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HMIS-ratings (scale 0 - 4)


HEALTH	2	Health = 2
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

Other hazards**Results of PBT and vPvB assessment**

PBT: Not applicable.

vPvB: Not applicable.

3 Composition/information on ingredients**Chemical characterization: Mixtures****Description:** Mixture of the substances listed below with nonhazardous additions.**Dangerous components:**

CAS: 7664-38-2	phosphoric acid	 Skin Corr. 1B, H314	10-20%
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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:** Immediately remove any clothing soiled by the product.**After inhalation:** In case of unconsciousness place patient stably in side position for transportation.**After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

Immediately rinse with water.

After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

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.

*** 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.**6 Accidental release measures****Personal precautions, protective equipment and emergency procedures** Wear protective clothing.**Environmental precautions:**

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

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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.

Protective Action Criteria for Chemicals

PAC-1:		
CAS: 7664-38-2	phosphoric acid	3 mg/m ³
PAC-2:		
CAS: 7664-38-2	phosphoric acid	30 mg/m ³
PAC-3:		
CAS: 7664-38-2	phosphoric acid	150 mg/m ³

7 Handling and storage**Precautions for safe handling** No special precautions are necessary if used correctly.**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:** Keep receptacle tightly sealed.**Storage class:** 8 B**Specific end use(s)** No further relevant information available.**8 Exposure controls/personal protection****Additional information about design of technical systems:** No further data; see item 7.**Control parameters**

Components with limit values that require monitoring at the workplace:	
CAS: 7664-38-2 phosphoric acid	
PEL	Long-term value: 1 mg/m ³
REL	Short-term value: 3 mg/m ³
	Long-term value: 1 mg/m ³
TLV	Short-term value: 3 mg/m ³
	Long-term value: 1 mg/m ³

Additional information: The lists that were valid during the creation were used as basis.**Exposure controls****Personal protective equipment:****General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Breathing equipment: Not required.**Protection of hands:**

Protective gloves

To avoid skin problems reduce the wearing of gloves to the required minimum.

Only use chemical-protective gloves with CE-labeling of category III.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

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Material of gloves

Nitrile rubber, NBR

Natural rubber, NR

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:*Tightly sealed goggles***Body protection:** *Protective work clothing**** 9 Physical and chemical properties****Information on basic physical and chemical properties****General Information****Appearance:****Form:***Fluid***Color:***Colorless***Odor:***Odorless***Odor threshold:***Not determined.***pH-value at 20 °C (68 °F):***<2***Change in condition****Melting point/Melting range:***Undetermined.***Boiling point/Boiling range:***100 °C (212 °F)***Flash point:***Not applicable.***Flammability (solid, gaseous):***Not applicable.***Auto igniting:***Product is not selfigniting.***Danger of explosion:***Product does not present an explosion hazard.
Not determined.***Explosion limits:****Lower:***Not determined.***Upper:***Not determined.***Vapor pressure at 20 °C (68 °F):***23 hPa (17.3 mm Hg)***Density at 20 °C (68 °F):***>1.076 g/cm³ (>8.979 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.***Viscosity:****Dynamic:***Not determined.***Kinematic:***Not determined.*

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USA —

Trade name: Elektrolyt COS21D-B

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Solvent content:**Water:** >85.0 %**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:** Irritant to skin and mucous membranes.**on the eye:** Irritating effect.**Sensitization:** No sensitizing effects known.**Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Irritant

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:**

Water hazard class 1 (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.

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.

13 Disposal considerations**Waste treatment methods****Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:**Recommendation:** Disposal must be made according to official regulations.

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— USA —

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Recommended cleansing agent: *Water, if necessary with cleansing agents.****14 Transport information**

UN-Number	UN1805
DOT, IMDG, IATA	
UN proper shipping name	
DOT	Phosphoric acid solution
IMDG	PHOSPHORIC ACID, SOLUTION
IATA	Phosphoric acid, solution
Transport hazard class(es)	
DOT	



Class	8 Corrosive substances
Label	8

IMDG, IATA



Class	8 Corrosive substances
Label	8
Packing group	
DOT, IMDG, IATA	III
Environmental hazards:	Not applicable.
Special precautions for user	Warning: Corrosive substances
Hazard identification number (Kemler code):	80
EMS Number:	F-A, S-B
Segregation groups	Acids
Stowage Category	A
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
DOT	
Quantity limitations	On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L

IMDG	
Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
UN "Model Regulation":	UN 1805 PHOSPHORIC ACID, SOLUTION, 8, III

***15 Regulatory information**Safety, health and environmental regulations/legislation specific for the substance or mixture
Sara

Section 355 (extremely hazardous substances):

None of the ingredient is listed.

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— USA —

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Section 313 (Specific toxic chemical listings):CAS: 7664-38-2 | *phosphoric 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.***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***The product is classified and labeled according to the Globally Harmonized System (GHS).***Hazard pictograms**

GHS07

Signal word *Warning***Hazard-determining components of labeling:***phosphoric acid***Hazard statements***Causes skin irritation.**Causes serious eye irritation.***Precautionary statements***Wear protective gloves / eye protection / face protection.**If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.**If skin irritation occurs: Get medical advice/attention.**Take off contaminated clothing and wash it before reuse.**If eye irritation persists: Get medical advice/attention.***National regulations:****Water hazard class:** *Water hazard class 1 (Self-assessment): slightly hazardous for water.***Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.*

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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 - TWRC

Contact: MSDS.pcc@endress.com

Date of preparation / last revision 11/01/2021 / 1

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

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

*** Data compared to the previous version altered.**