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

**1.1 Product identifier**

**Trade name:** **Electrolyte COS41/COS51x**

**Article number:** *COV45-41TNx/51Txx*

**1.2 Relevant identified uses of the substance or mixture and uses advised against**
*No further relevant information available.*

**Application of the substance / the mixture** *Laboratory chemicals*

**1.3 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*

**1.4 Emergency telephone number:** *0064 800 764 766*

## * SECTION 2: Hazards identification

**2.1 Classification of the substance or mixture**
**Classification according to Regulation (EC) No 1272/2008**

*corrosion*

*Skin Corr. 1A H314 Causes severe skin burns and eye damage.*
*Eye Dam. 1 H318 Causes serious eye damage.*

**Classification according to Directive 67/548/EEC or Directive 1999/45/EC** *Not applicable.*

**Information concerning particular hazards for human and environment:**
*The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.*
**Classification system:**
*The classification is according to the latest editions of the EU-lists, and extended by company and literature data.*

**2.2 Label elements**

**Labelling according to EU guidelines:**
*Observe the general safety regulations when handling chemicals.*
*The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.*

**Safety phrases:**
*29 Do not empty into drains.*

**Special labelling of certain preparations:**
*Safety data sheet available for professional user on request.*
**2.3 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.*

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## SECTION 3: Composition/Information on ingredients

**3.2 Mixtures**
**Description:** *Mixture of substances listed below with nonhazardous additions.*

| **Dangerous components:** | | |
|---|---|---|
| *CAS: 584-08-7*<br>*EINECS: 209-529-3* | *potassium carbonate*<br>*Xi R36*<br>*Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335* | *5-10%* |

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

## SECTION 4: First aid measures

**4.1 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:**
*Rinse with warm water.*
*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. Then consult a doctor.*

**After swallowing:** *Drink plenty of water and provide fresh air. Call for a doctor immediately.*
**4.2 Most important symptoms and effects, both acute and delayed**
*No further relevant information available.*

**4.3 Indication of any immediate medical attention and special treatment needed**
*No further relevant information available.*

## SECTION 5: Fire fighting measures

**5.1 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*
**5.2 Special hazards arising from the substance or mixture**
*During heating or in case of fire poisonous gases are produced.*
**5.3 Advice for firefighters** *No further relevant information available.*
**Protective equipment:** *Mount respiratory protective device.*

## SECTION 6: Accidental release measures

**6.1 Personal precautions, protective equipment and emergency procedures**
*Mount respiratory protective device.*
*Wear protective equipment. Keep unprotected persons away.*
*Wear protective clothing.*
**6.2 Environmental precautions:**
*Dilute with plenty of water.*
*Do not allow to enter sewers/ surface or ground water.*
**6.3 Methods and material for containment and cleaning up:**
*Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).*
*Use neutralising agent.*
*Dispose contaminated material as waste according to section 13.*
*Ensure adequate ventilation.*
**6.4 Reference to other sections**
*No dangerous substances are released.*
*See Section 7 for information on safe handling.*

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*See Section 8 for information on personal protection equipment.*
*See Section 13 for disposal information.*

## SECTION 7: Handling and storage

**7.1 Precautions for safe handling**
*Ensure good ventilation/exhaustion at the workplace.*
*Prevent formation of aerosols.*
**Information about fire - and explosion protection:** *Keep respiratory protective device available.*

**7.2 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:** *Keep container tightly sealed.*
**Storage class:** *8 B*
**7.3 Specific end use(s)** *No further relevant information available.*

## SECTION 8: Exposure controls/personal protection

**8.1 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.*

**8.2 Exposure controls**
**Appropriate engineering controls** *No further data; see section 7.*
**Individual protection measures, such as 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.*
*Avoid contact with the eyes and skin.*

**Respiratory protection:**
*In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.*

**Hand protection**
*Protective gloves and protective skin cream*

*Protective gloves*

*To avoid skin problems reduce the wearing of gloves to the required minimum.*
*Only use chemical-protective gloves with CE-labelling of category III.*
*The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.*

**Material of gloves**
*Nitrile rubber, NBR*
*Chloroprene rubber, CR*
*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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.*

**Eye/face protection**

*Tightly sealed goggles*

**Body protection:** *Protective work clothing*

## SECTION 9: Physical and chemical properties

**9.1 Information on basic physical and chemical properties**

| | |
|---|---|
| **General Information** | |
| **Physical state** | *Fluid* |
| **Colour:** | *Colourless* |
| **Odour:** | *Odourless* |
| **Odour threshold:** | *Not determined.* |
| **Melting point/freezing point:** | *6 °C* |
| **Boiling point or initial boiling point and boiling range** | *100 °C* |
| **Flammability** | *Not applicable.* |
| **Lower and upper explosion limit** | |
| **Lower:** | *Not determined.* |
| **Upper:** | *Not determined.* |
| **Flash point:** | *Not applicable.* |
| **Decomposition temperature:** | *Not determined.* |
| **pH at 20 °C** | *12.3* |
| **Viscosity:** | |
| **Kinematic viscosity** | *Not determined.* |
| **Kinematic viscosity** | |
| **Dynamic:** | *Not determined.* |
| **Solubility** | |
| **water:** | *Fully miscible.* |
| **Partition coefficient n-octanol/water (log value)** | *Not determined.* |
| **Vapour pressure at 20 °C:** | *23 hPa* |
| **Vapour pressure:** | |
| **Density and/or relative density** | |
| **Density at 20 °C:** | *1.059 g/cm³* |
| **Relative density** | *Not determined.* |
| **Vapour density** | *Not determined.* |

**9.2 Other information**

| | |
|---|---|
| **Appearance:** | |
| **Form:** | *Fluid* |
| **Important information on protection of health and environment, and on safety.** | |
| **Ignition temperature:** | *Product is not selfigniting.* |
| **Explosive properties:** | *Product does not present an explosion hazard.* |
| | *Not determined.* |
| **Solvent content:** | |
| **Water:** | *>85.0 %* |
| **Solids content:** | *0.0 %* |
| **Change in condition** | |
| **Evaporation rate** | *Not determined.* |

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| | |
|---|---|
| **Information with regard to physical hazard classes** | |
| **Explosives** | *Void* |
| **Flammable gases** | *Void* |
| **Aerosols** | *Void* |
| **Oxidising gases** | *Void* |
| **Gases under pressure** | *Void* |
| **Flammable liquids** | *Void* |
| **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 flammable 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

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

## SECTION 11: Toxicological information

**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
**Acute toxicity** *Based on available data, the classification criteria are not met.*

| **LD/LC50 values relevant for classification:** | | |
|---|---|---|
| ***CAS: 584-08-7 potassium carbonate*** | | |
| *Oral* | *LD50* | *1,870 mg/kg (rat)* |

**Skin corrosion/irritation** *Causes severe skin burns and eye damage.*
**Serious eye damage/irritation** *Causes serious eye damage.*
**11.2 Information on other hazards**

| **Endocrine disrupting properties** |
|---|
| *None of the ingredients is listed.* |

## SECTION 12: Ecological information

**12.1 Toxicity**
**Aquatic toxicity:** *No further relevant information available.*
**12.2 Persistence and degradability** *No further relevant information available.*
**12.3 Bioaccumulative potential** *No further relevant information available.*
**12.4 Mobility in soil** *No further relevant information available.*
**12.5 Results of PBT and vPvB assessment**
**PBT:** *Not applicable.*
**vPvB:** *Not applicable.*

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**12.6 Endocrine disrupting properties**
*The product does not contain substances with endocrine disrupting properties.*
**12.7 Other adverse effects**
**Additional ecological information:**
**General notes:**
*Water hazard class 1 (German Regulation) (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.*
*Must not reach sewage water or drainage ditch undiluted or unneutralised.*
*Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.*

## SECTION 13: Disposal considerations

**13.1 Waste treatment methods**
**Recommendation**
*Must not be disposed together with household garbage. Do not allow product to reach sewage system.*

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

* 
## SECTION 14: Transport information

| | |
|---|---|
| **14.1 UN number or ID number** | |
| **ADN, IMDG, IATA** | *Void* |
| **14.2 UN proper shipping name** | |
| **NZS, ADN, IMDG, IATA** | *Void* |
| **14.3 Transport hazard class(es)** | |
| **NZS, ADN, IMDG, IATA** | |
| **Class** | *Void* |
| **14.4 Packing group** | |
| **NZS, IMDG, IATA** | *Void* |
| **14.5 Environmental hazards:** | *Not applicable.* |
| **14.6 Special precautions for user** | *Not applicable.* |
| **14.7 Maritime transport in bulk according to IMO instruments** | *Not applicable.* |
| **UN "Model Regulation":** | *Void* |

* 
## SECTION 15: Regulatory information

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

| **New Zealand Inventory of Chemicals** |
|---|
| *All ingredients are listed.* |

**Directive 2012/18/EU**
**Named dangerous substances - ANNEX I** *None of the ingredients is listed.*

**National regulations:**

**Waterhazard class:** *Water hazard class 1 (Self-assessment): slightly hazardous for water.*
**15.2 Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.*

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## 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.*

**16.1 Relevant phrases**
*H315 Causes skin irritation.*
*H319 Causes serious eye irritation.*
*H335 May cause respiratory irritation.*

*R36 Irritating to eyes.*
**16.3 Recommended restriction of use**

**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*
*GHS: Globally Harmonised System of Classification and Labelling of Chemicals*
*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)*
*LC50: Lethal concentration, 50 percent*
*LD50: Lethal dose, 50 percent*
*PBT: Persistent, Bioaccumulative and Toxic*
*vPvB: very Persistent and very Bioaccumulative*
*Skin Corr. 1A: Skin corrosion/irritation – Category 1A*
*Skin Irrit. 2: Skin corrosion/irritation – Category 2*
*Eye Dam. 1: Serious eye damage/eye irritation – Category 1*
*Eye Irrit. 2: Serious eye damage/eye irritation – Category 2*
*STOT SE 3: Specific target organ toxicity (single exposure) – Category 3*
*** Data compared to the previous version altered.**