* SECTION 1: Identification of the substance/mixture and of the company/ undertaking

Product identifier

Trade name: Elektrolyt CCS120/120D

Article number: *71412916*

Relevant identified uses of the substance or mixture and uses advised against
Product category *PC21 Laboratory chemicals*

Application of the substance / the mixture
electrolyte
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 209-117
Fax.: +49 (0)7156 209-222
E-Mail: MSDS.PCC@endress.com

Emergency telephone number: *00971 800 424 (from 7 am to 3 pm, from Sunday to Thursday)*

* SECTION 2: Hazards identification

Classification of the substance or mixture

health hazard

STOT RE 2 H373 May cause damage to the thyroid through prolonged or repeated exposure. Route of exposure: Oral.

Label elements
GHS label elements
The product is classified and labelled according to the Globally Harmonised System (GHS).
Hazard pictograms

GHS08

Signal word *Warning*

Hazard-determining components of labelling:
potassium iodide
Hazard statements
May cause damage to the thyroid through prolonged or repeated exposure. Route of exposure: Oral.
Precautionary statements
Do not breathe dust/fume/gas/mist/vapours/spray.
Get medical advice/attention if you feel unwell.
Dispose of contents/container in accordance with local/regional/national/international regulations.
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.*

(Contd. on page 2)

(Contd. of page 1)

vPvB: *Not applicable.*

* SECTION 3: Composition/information on ingredients

Mixtures
Description: *aqueous solution*

Dangerous components:			
CAS: 7681-11-0 *EINECS: 231-659-4*	*potassium iodide*	*STOT RE 1, H372*	*5-10%*

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

* SECTION 4: First aid measures

Description of first aid measures

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: *Rinse out mouth and then drink plenty of water.*
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.

* SECTION 5: Firefighting 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
During heating or in case of fire poisonous gases are produced.
Advice for firefighters *No further relevant information available.*
Protective equipment: *Mount respiratory protective device.*

* SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures
Mount respiratory protective device.
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).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
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.

(Contd. on page 3)

(Contd. of page 2)

* SECTION 7: Handling and storage

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.*

Conditions for safe storage, including any incompatibilities

Storage:
Requirements to be met by storerooms and receptacles: *Do not use light alloy receptacles.*
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.*

* SECTION 8: Exposure controls/personal protection

Control parameters

Ingredients with limit values that require monitoring at the workplace:	
CAS: 7681-11-0 potassium iodide	
TLV (USA)	*Long-term value: 0.01 ppm* *A4; Skin; *inhalation*

DNELs		
CAS: 7681-11-0 potassium iodide		
Oral	*DNEL long term exposure*	*0.01 mg/kg /bw/day (consumer) (systemic effect)*
Dermal	*DNEl long term*	*1 mg/kg /bw/day (worker) (systemic effect)*
		1 mg/kg /bw/day (consumer) (systemic effect)
Inhalative	*DNEL long-term*	*0.07 mg/m³ (worker) (systemic effect)*
		0.035 mg/m³ (consumer) (systemic effect)

PNECs	
CAS: 7681-11-0 potassium iodide	
PNEC	*0.007 mg/L (fresh water)*
PNEC	*0.007 mg/kg (freshwater sediment)*

Additional information: *The lists valid during the making were used as basis.*

Exposure controls
Appropriate engineering controls *No further data; see item 7.*
Individual protection measures, such as personal protective equipment

General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Store protective clothing separately.

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

To avoid skin problems reduce the wearing of gloves to the required minimum.
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

(Contd. on page 4)

(Contd. of page 3)

No chemical-protective gloves required.

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.

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

Information on basic physical and chemical properties

General Information	
Physical state	*Fluid*
Colour:	*Light yellow*
Odour:	*Characteristic*
Odour threshold:	*Not determined.*
Melting point/freezing point:	*Undetermined.*
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.*
Auto-ignition temperature:	*Product is not selfigniting.*
Decomposition temperature:	*Not determined.*
pH at 20 °C	*7*
Viscosity:	
Kinematic viscosity	*Not determined.*
Dynamic:	*Not determined.*
Solubility	
water:	*Fully miscible.*
Partition coefficient n-octanol/water (log value)	*Not determined.*
Vapour pressure at 20 °C:	*23 hPa*
Density and/or relative density	
Density at 20 °C:	*1.05 g/cm³*
Relative density	*Not determined.*
Vapour density	*Not determined.*
Other information	
Appearance:	
Form:	*Highly viscous*
Important information on protection of health and environment, and on safety.	
Ignition temperature:	*>360 °C*

(Contd. on page 5)

(Contd. of page 4)

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.*
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

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 *Reacts with various metals.*
Conditions to avoid *No further relevant information available.*
Incompatible materials: *No further relevant information available.*
Hazardous decomposition products: *No dangerous decomposition products known.*

* SECTION 11: Toxicological information

Information on hazard classes as defined in Regulation (EC) No 1272/2008
STOT-repeated exposure
May cause damage to the thyroid through prolonged or repeated exposure. Route of exposure: Oral.
Information on other hazards

Endocrine disrupting properties
None of the ingredients is listed.

* SECTION 12: Ecological information

Toxicity
Aquatic toxicity: *No further relevant information available.*
Persistence and degradability *No further relevant information available.*
Bioaccumulative potential *No further relevant information available.*
Mobility in soil *No further relevant information available.*

(Contd. on page 6)

(Contd. of page 5)

Results of PBT and vPvB assessment
PBT: *Not applicable.*
vPvB: *Not applicable.*
Endocrine disrupting properties
The product does not contain substances with endocrine disrupting properties.
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.

* SECTION 13: Disposal considerations

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

UN number or ID 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*
Environmental hazards: *Not applicable.*
Special precautions for user *Not applicable.*
Maritime transport in bulk according to IMO instruments *Not applicable.*
UN "Model Regulation": *Void*

* SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture
GHS label elements
The product is classified and labelled according to the Globally Harmonised System (GHS).
Hazard pictograms

GHS08

Signal word *Warning*

Hazard-determining components of labelling:
potassium iodide
Hazard statements
May cause damage to the thyroid through prolonged or repeated exposure. Route of exposure: Oral.

(Contd. on page 7)

(Contd. of page 6)

Precautionary statements
Do not breathe dust/fume/gas/mist/vapours/spray.
Get medical advice/attention if you feel unwell.
Dispose of contents/container in accordance with local/regional/national/international regulations.

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.*
Chemical safety assessment: *A Chemical Safety Assessment has not been carried out.*

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.

Department issuing SDS: *PCC-TWRC*
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)
ICAO: International Civil Aviation Organisation
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
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)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
*** Data compared to the previous version altered.**