

Product code	Description
CY80TP-FF+SH	CA80TP Reagent Set for total phosphate

Components:

71251096B	CA80TP Reagent RB, Component 1
51509012D	CA80TP Reagent RK, Component 1
51509014D	CA80TP Reagent RN, Component 1
51509015D	CA80TP Reagent RN, Component 2
51509017D	CA80TP Reagent RN, Component 3

SECTION 1: Identification of the substance or mixture and of the supplier**1.1 Product identifier**Trade name: **CA80TP Reagent RB, Component 1**

Article number: 71251096B

CAS Number:

7775-27-1

EC number:

231-892-1

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



flame over circle

Oxidising solids Category 2

H272 May intensify fire; oxidizer.



health hazard

Respiratory sensitisation Category 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.



Acute oral toxicity Category 4

H302 Harmful if swallowed.

Skin sensitisation Category 1

H317 May cause an allergic skin reaction.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS03



GHS07



GHS08

Signal word *Danger*

(Contd. on page 2)

— NZ —

Trade name: CA80TP Reagent RB, Component 1

(Contd. of page 1)

Hazard-determining components of labelling:*sodium persulphate***Hazard statements***H272 May intensify fire; oxidizer.**H302 Harmful if swallowed.**H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.**H317 May cause an allergic skin reaction.***Precautionary statements***P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.**P220 Keep away from clothing and other combustible materials.**P261 Avoid breathing dust/fume/gas/mist/vapours/spray.**P284 [In case of inadequate ventilation] wear respiratory protection.**P501 Dispose of contents/container in accordance with local/regional/national/international regulations.***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.***SECTION 3: Composition/Information on ingredients****3.1 Substances****CAS No. Description***CAS: 7775-27-1 sodium persulphate***Identification number(s)***EC number: 231-892-1***SECTION 4: First aid measures****4.1 Description of first aid measures****General information:***Immediately remove any clothing soiled by the product.**Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.***After inhalation:***Supply fresh air and to be sure call for a doctor.**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.***After swallowing:** *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** *No further relevant information available.*

(Contd. on page 3)

Trade name: CA80TP Reagent RB, Component 1

(Contd. of page 2)

5.3 Advice for firefighters *No further relevant information available.*
Protective equipment: *No special measures required.*

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures *Wear protective clothing.*

6.2 Environmental precautions: *Do not allow to enter sewers/ surface or ground water.*

6.3 Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

6.4 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.

SECTION 7: Handling and storage

7.1 Precautions for safe handling *Ensure good ventilation/exhaustion at the workplace.*

Information about fire - and explosion protection: *No special measures required.*

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: *None.*

Storage class: 5.1 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: *Not required.*

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.

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.

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.

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.

(Contd. on page 4)

Trade name: CA80TP Reagent RB, Component 1

(Contd. of page 3)

*Nitrile rubber, NBR**Natural rubber, NR***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.***Body protection:** *Protective work clothing***SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****General Information****Physical state***Solid***Colour:***Colourless***Odour:***Odourless***Odour threshold:***Not determined.***Melting point/freezing point:***Undetermined.***Boiling point or initial boiling point and boiling range***Undetermined.***Flammability***Product is not flammable.***Lower and upper explosion limit****Lower:***Not determined.***Upper:***Not determined.***Flash point:***Not applicable.***Decomposition temperature:***Not determined.***pH***Slightly acidic***Viscosity:****Kinematic viscosity***Not applicable.***Dynamic:***Not applicable.***Solubility****water:***Easily soluble.***Partition coefficient n-octanol/water (log value)***Not determined.***Vapour pressure:***Not applicable.***Density and/or relative density****Density at 20 °C:***1.1 g/cm³***Relative density***Not determined.***Vapour density***Not applicable.***Particle characteristics***Not determined.***9.2 Other information****Appearance:****Form:***Crystalline powder***Important information on protection of health and environment, and on safety.****Ignition temperature:***Not determined.***Explosive properties:***Product does not present an explosion hazard.**Not determined.***Solids content:***100.0 %***Molecular weight***238.09 g/mol***Change in condition****Evaporation rate***Not applicable.***Information with regard to physical hazard classes****Explosives***Void***Flammable gases***Void***Aerosols***Void***Oxidising gases***Void***Gases under pressure***Void*

(Contd. on page 5)

— NZ —

Trade name: CA80TP Reagent RB, Component 1

(Contd. of page 4)

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	May intensify fire; oxidizer.
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** Harmful if swallowed.**LD/LC50 values relevant for classification:****CAS: 7775-27-1 sodium persulphate**

Oral LD50 920 mg/kg (rat)

Respiratory or skin sensitisation

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

11.2 Information on other hazards**Endocrine disrupting properties**

Substance is not 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.

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) (Assessment by list): slightly hazardous for water

(Contd. on page 6)

Trade name: CA80TP Reagent RB, Component 1

(Contd. of page 5)

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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.*

SECTION 14: Transport information**14.1 UN number or ID number**

IMDG, IATA

UN1505

14.2 UN proper shipping name

NZS

UN1505 SODIUM PERSULPHATE

IMDG

SODIUM PERSULPHATE

IATA

Sodium persulphate

14.3 Transport hazard class(es)

NZS



Class
Label

5.1 (O2) Oxidising substances.
5.1

IMDG, IATA



Class
Label

5.1 Oxidising substances.
5.1

14.4 Packing group

NZS, IMDG, IATA

III

14.5 Environmental hazards:

Not applicable.

14.6 Special precautions for user

Warning: Oxidising substances.

Hazard identification number (Kemler code):

50

EMS Number:

F-A,S-Q

Stowage Category

A

Segregation Code

SG38 Stow "separated from" SGG2-ammonium compounds.

SG49 Stow "separated from" SGG6-cyanides

14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

Transport/Additional information:

NZS

Limited quantities (LQ)

5 kg

Transport category

3

Tunnel restriction code

E

(Contd. on page 7)

— NZ —

Trade name: CA80TP Reagent RB, Component 1

(Contd. of page 6)

IMDG

Limited quantities (LQ)

5 kg

Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 1000 g

UN "Model Regulation":

UN 1505 SODIUM PERSULPHATE, 5.1, III

SECTION 15: Regulatory information

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

New Zealand Inventory of Chemicals

Substance is listed.

HSNO Approval numbers

HSR001357

Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS03 GHS07 GHS08

Signal word *Danger*

Hazard-determining components of labelling:

sodium persulphate

Hazard statements

H272 May intensify fire; oxidizer.

H302 Harmful if swallowed.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P220 Keep away from clothing and other combustible materials.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P284 [In case of inadequate ventilation] wear respiratory protection.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Directive 2012/18/EU

Named dangerous substances - ANNEX I Substance is not listed.

Seveso category P8 OXIDISING LIQUIDS AND SOLIDS

Qualifying quantity (tonnes) for the application of lower-tier requirements 50 t

Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t

National regulations:

Waterhazard class: Water hazard class 1 (Assessment by list): slightly hazardous for water.

15.2 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.

16.3 Recommended restriction of use

Department issuing SDS: PCC-TWR

Contact: MSDS.pcc@endress.com

(Contd. on page 8)

Trade name: CA80TP Reagent RB, Component 1

(Contd. of page 7)

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

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

Oxidising solids Category 2: Oxidizing solids – Category 2

Acute oral toxicity Category 4: Acute toxicity – Category 4

Respiratory sensitisation Category 1: Respiratory sensitisation – Category 1

Skin sensitisation Category 1: Skin sensitisation – Category 1

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

SECTION 1: Identification of the substance or mixture and of the supplier**1.1 Product identifier****Trade name:** CA80TP Reagent RK, Component 1**Article number:** 51509012D**CAS Number:**

50-81-7

EC number:

200-066-2

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***The substance is not classified, according to the CLP regulation.***2.2 Label elements****Labelling according to Regulation (EC) No 1272/2008** *Void***Hazard pictograms** *Void***Signal word** *Void***Hazard statements** *Void***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.***SECTION 3: Composition/Information on ingredients****3.1 Substances****CAS No. Description***CAS: 50-81-7 L (+) - ascorbic acid***Identification number(s)****EC number:** 200-066-2**SECTION 4: First aid measures****4.1 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.*

(Contd. on page 2)

— NZ —

Trade name: CA80TP Reagent RK, Component 1

(Contd. of page 1)

After eye contact: *Rinse opened eye for several minutes under running water.*

After swallowing: *If symptoms persist consult doctor.*

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 *No further relevant information available.***5.3 Advice for firefighters** *No further relevant information available.*

Protective equipment: *No special measures required.*

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures** *Wear protective clothing.***6.2 Environmental precautions:** *Do not allow to enter sewers/ surface or ground water.***6.3 Methods and material for containment and cleaning up:** *Pick up mechanically.***6.4 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.

SECTION 7: Handling and storage**7.1 Precautions for safe handling** *No special measures required.*

Information about fire - and explosion protection: *No special measures required.*

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: *None.*

Storage class: *11*

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: *Not required.*

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:

The usual precautionary measures are to be adhered to when handling chemicals.

Respiratory protection: *Not required.*

Hand protection *No chemical-protective gloves required.*

(Contd. on page 3)

Trade name: CA80TP Reagent RK, Component 1

(Contd. of page 2)

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.

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.

Eyeface protection Not required.

Body protection: Protective work clothing

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties****General Information**

Physical state	Solid
Colour:	Whitish
Odour:	Odourless
Odour threshold:	Not determined.
Melting point/freezing point:	191 °C
Boiling point or initial boiling point and boiling range	Undetermined.
Flammability	Product is not flammable.
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	Not applicable.
Decomposition temperature:	Not determined.
pH	Slightly acidic
Viscosity:	
Kinematic viscosity	Not applicable.
Dynamic:	Not applicable.
Solubility	
water at 20 °C:	333 g/l
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure:	Not applicable.
Density and/or relative density	
Density at 20 °C:	0.95 g/cm ³
Relative density	Not determined.
Vapour density	Not applicable.
Particle characteristics	Not determined.

9.2 Other information

Appearance:	
Form:	Crystalline powder
Important information on protection of health and environment, and on safety.	
Ignition temperature:	Not determined.
Explosive properties:	Product does not present an explosion hazard. Not determined.
Solids content:	100.0 %
Molecular weight	176.13 g/mol
Change in condition	
Evaporation rate	Not applicable.
Information with regard to physical hazard classes	
Explosives	Void
Flammable gases	Void

(Contd. on page 4)

Trade name: CA80TP Reagent RK, Component 1

(Contd. of page 3)

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: 50-81-7 L (+) - ascorbic acid

Oral LD50 11,900 mg/kg (rat)

Skin corrosion/irritation *Based on available data, the classification criteria are not met.*Serious eye damage/irritation *Based on available data, the classification criteria are not met.*Respiratory or skin sensitisation *Based on available data, the classification criteria are not met.*Germ cell mutagenicity *Based on available data, the classification criteria are not met.*Carcinogenicity *Based on available data, the classification criteria are not met.*Reproductive toxicity *Based on available data, the classification criteria are not met.*STOT-single exposure *Based on available data, the classification criteria are not met.*STOT-repeated exposure *Based on available data, the classification criteria are not met.*Aspiration hazard *Based on available data, the classification criteria are not met.*

11.2 Information on other hazards

Endocrine disrupting properties

Substance is not 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.*

(Contd. on page 5)

Trade name: CA80TP Reagent RK, Component 1

(Contd. of page 4)

12.5 Results of PBT and vPvB assessment**PBT:** *Not applicable.***vPvB:** *Not applicable.***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) (Assessment by list): 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****13.1 Waste treatment methods****Recommendation** *Smaller quantities can be disposed of with household waste.***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:****Marine pollutant:***No***14.6 Special precautions for user***Not applicable.***14.7 Maritime transport in bulk according to IMO instruments***Not applicable.***Transport/Additional information:***Not dangerous according to the above specifications.***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***Substance is listed.***HSNO Approval numbers***Substance is not listed.***Labelling according to Regulation (EC) No 1272/2008** *Void***Hazard pictograms** *Void***Signal word** *Void***Hazard statements** *Void***Directive 2012/18/EU****Named dangerous substances - ANNEX I** *Substance is not listed.***National regulations:****Waterhazard class:** *Water hazard class 1 (Assessment by list): slightly hazardous for water.*

(Contd. on page 6)

Trade name: CA80TP Reagent RK, Component 1

(Contd. of page 5)

15.2 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.

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

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

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

— NZ —

SECTION 1: Identification of the substance or mixture and of the supplier**1.1 Product identifier**Trade name: **CA80TP Reagent RN, Component 1**

Article number: 51509014D

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 corrosion Category 1A H314 Causes severe skin burns and eye damage.

Serious eye damage Category 1 H318 Causes serious eye damage.

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

Hazard pictograms

GHS05

Signal word Danger**Hazard-determining components of labelling:**

sulphuric acid

Hazard statements

H314 Causes severe skin burns and eye damage.

Precautionary statements

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P321 Specific treatment (see on this label).

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

Trade name: CA80TP Reagent RN, Component 1

(Contd. of page 1)

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/Information on ingredients

3.2 Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 7664-93-9	sulphuric acid	 Skin corrosion Category 1A, H314	30-50%
EINECS: 231-639-5			

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:

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.

(Contd. on page 3)

Trade name: CA80TP Reagent RN, Component 1

(Contd. of page 2)

6.4 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.

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

When diluting always pour product into water and not vice versa.

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:****CAS: 7664-93-9 sulphuric acid**WES (New Zealand) Long-term value: 0.1 mg/m³
confirmed carcinogenIOELV (EU) Long-term value: 0.05 mg/m³**DNELs****CAS: 7664-93-9 sulphuric acid**Inhalative DNEL short-term 0.1 mg/m³ (worker) (local effects)DNEL long-term 0.05 mg/m³ (worker) (local effects)**PNECs****CAS: 7664-93-9 sulphuric acid**

PNEC 8.8 mg/L (Wastewater treatment plant)

0.25 mg/L (sea water)

PNEC 2.5 µg/L (fresh water)

PNEC 2 µg/kg (marine sediment)

2 µg/kg (freshwater sediment)

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.

(Contd. on page 4)

Trade name: CA80TP Reagent RN, Component 1

(Contd. of page 3)

Hand protection*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.

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.

Eyeface 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:***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.***Decomposition temperature:***Not determined.***pH at 20 °C***<1***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:***1.42 g/cm³***Relative density***Not determined.***Vapour density***Not determined.***Particle characteristics***Not applicable.*

(Contd. on page 5)

Trade name: CA80TP Reagent RN, Component 1

(Contd. of page 4)

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:**

50.0 %

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**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.**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.

(Contd. on page 6)

Trade name: CA80TP Reagent RN, Component 1

(Contd. of page 5)

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.**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 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.***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****IMDG, IATA**

UN2796

14.2 UN proper shipping name**NZS**

UN2796 SULPHURIC ACID

IMDG

SULPHURIC ACID

IATA

Sulphuric acid

14.3 Transport hazard class(es)**NZS****Class**

8 (C1) Corrosive substances.

Label

8

IMDG, IATA**Class**

8 Corrosive substances.

Label

8

(Contd. on page 7)

Trade name: CA80TP Reagent RN, Component 1

(Contd. of page 6)

14.4 Packing group

NZS, IMDG, IATA

II

14.5 Environmental hazards:

Not applicable.

14.6 Special precautions for user

Warning: Corrosive substances.

Hazard identification number (Kemler code):

80

EMS Number:

F-A, S-B

Segregation groups

(SGG1a) Strong acids

Stowage Category

B

Segregation Code

SG36 Stow "separated from" SGG18-alkalis.

SG49 Stow "separated from" SGG6-cyanides

14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

Transport/Additional information:

NZS

Limited quantities (LQ)

1L

Transport category

2

Tunnel restriction code

E

IMDG

Limited quantities (LQ)

1L

Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

UN "Model Regulation":

UN 2796 SULPHURIC ACID, 8, II

* 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.

HSNO Approval numbers

None of the ingredients is listed.

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS05

Signal word *Danger*

Hazard-determining components of labelling:

sulphuric acid

Hazard statements

H314 Causes severe skin burns and eye damage.

Precautionary statements

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P321 Specific treatment (see on this label).

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 8)

Trade name: CA80TP Reagent RN, Component 1

(Contd. of page 7)

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.***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*H314 Causes severe skin burns and eye damage.***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)**DNEL: Derived No-Effect Level (REACH)**PNEC: Predicted No-Effect Concentration (REACH)**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Skin corrosion Category 1A: Skin corrosion/irritation – Category 1A**Serious eye damage Category 1: Serious eye damage/eye irritation – Category 1**** Data compared to the previous version altered.**

SECTION 1: Identification of the substance or mixture and of the supplier**1.1 Product identifier****Trade name:** CA80TP Reagent RN, Component 2**Article number:** 51509015D**CAS Number:**

12054-85-2

EC number:

234-722-4

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***The substance is not classified, according to the CLP regulation.***2.2 Label elements****Labelling according to Regulation (EC) No 1272/2008** *Void***Hazard pictograms** *Void***Signal word** *Void***Hazard statements** *Void***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.***SECTION 3: Composition/Information on ingredients****3.1 Substances****CAS No. Description***CAS: 12054-85-2 Ammonium heptamolybdate tetrahydrate***Identification number(s)****EC number:** 234-722-4**SECTION 4: First aid measures****4.1 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.*

(Contd. on page 2)

— NZ —

Trade name: CA80TP Reagent RN, Component 2

(Contd. of page 1)

After eye contact: *Rinse opened eye for several minutes under running water.*

After swallowing: *If symptoms persist consult doctor.*

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 *No further relevant information available.*

5.3 Advice for firefighters *No further relevant information available.*

Protective equipment: *No special measures required.*

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures *Wear protective clothing.*

6.2 Environmental precautions: *Do not allow to enter sewers/ surface or ground water.*

6.3 Methods and material for containment and cleaning up: *Pick up mechanically.*

6.4 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.

SECTION 7: Handling and storage

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

Information about fire - and explosion protection: *No special measures required.*

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: *None.*

Storage class: *11*

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: *Not required.*

DNELs

CAS: 12054-85-2 Ammonium heptamolybdate tetrahydrate

Inhalative DNEL long-term 13.36 mg/m³ (worker) (systemic effect)

PNECs

CAS: 12054-85-2 Ammonium heptamolybdate tetrahydrate

PNEC 37.61 mg/L (Wastewater treatment plant)

22.01 mg/L (fresh water)

3.94 mg/L (sea water)

PNEC 4,090 mg/kg (marine sediment)

(Contd. on page 3)

Trade name: CA80TP Reagent RN, Component 2

(Contd. of page 2)

39,170 mg/kg (freshwater sediment)

16.46 mg/kg /dw (soil)

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:***The usual precautionary measures are to be adhered to when handling chemicals.***Respiratory protection:** *Not required.***Hand protection** *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.***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.***Eyeface protection** *Not required.***Body protection:** *Protective work clothing**** SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****General Information****Physical state***Solid***Colour:***White***Odour:***Odourless***Odour threshold:***Not determined.***Melting point/freezing point:***90 °C***Boiling point or initial boiling point and boiling range***Undetermined.***Flammability***Product is not flammable.***Lower and upper explosion limit****Lower:***Not determined.***Upper:***Not determined.***Flash point:***Not applicable.***Decomposition temperature:***Not determined.***pH***5.3***Viscosity:****Kinematic viscosity***Not applicable.***Dynamic:***Not applicable.***Solubility****water at 20 °C:***400 g/l***Partition coefficient n-octanol/water (log value)** *Not determined.***Vapour pressure:***Not applicable.***Density and/or relative density****Density at 20 °C:***2.498 g/cm³***Relative density***Not determined.***Bulk density:***800 kg/m³***Vapour density***Not applicable.***Particle characteristics***Not determined.*

(Contd. on page 4)

— NZ —

Trade name: CA80TP Reagent RN, Component 2

(Contd. of page 3)

9.2 Other information**Appearance:****Form:***Crystalline powder***Important information on protection of health and environment, and on safety.****Ignition temperature:***Not determined.***Explosive properties:***Product does not present an explosion hazard.**Not determined.***Solids content:***100.0 %***Molecular weight***1,235.86 g/mol***Change in condition****Evaporation rate***Not applicable.***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.***Skin corrosion/irritation** *Based on available data, the classification criteria are not met.***Serious eye damage/irritation** *Based on available data, the classification criteria are not met.***Respiratory or skin sensitisation** *Based on available data, the classification criteria are not met.***Germ cell mutagenicity** *Based on available data, the classification criteria are not met.***Carcinogenicity** *Based on available data, the classification criteria are not met.***Reproductive toxicity** *Based on available data, the classification criteria are not met.***STOT-single exposure** *Based on available data, the classification criteria are not met.***STOT-repeated exposure** *Based on available data, the classification criteria are not met.***Aspiration hazard** *Based on available data, the classification criteria are not met.*

(Contd. on page 5)

Trade name: CA80TP Reagent RN, Component 2

(Contd. of page 4)

11.2 Information on other hazards**Endocrine disrupting properties***Substance is not 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.***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.***SECTION 13: Disposal considerations****13.1 Waste treatment methods****Recommendation** *Smaller quantities can be disposed of with household waste.***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:**Marine pollutant:**

No

14.6 Special precautions for user

Not applicable.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

Transport/Additional information:

Not dangerous according to the above specifications.

UN "Model Regulation":

Void

(Contd. on page 6)

— NZ —

Trade name: CA80TP Reagent RN, Component 2

(Contd. of page 5)

*** SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****New Zealand Inventory of Chemicals***Substance is listed.***HSNO Approval numbers***Substance is not listed.***Labelling according to Regulation (EC) No 1272/2008** *Void***Hazard pictograms** *Void***Signal word** *Void***Hazard statements** *Void***Directive 2012/18/EU****Named dangerous substances - ANNEX I** *Substance is not 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.***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.***16.3 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**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**** Data compared to the previous version altered.**

SECTION 1: Identification of the substance or mixture and of the supplier**1.1 Product identifier**Trade name: **CA80TP Reagent RN, Component 3**

Article number: 51509017D

CAS Number:

28300-74-5

EC number:

234-293-3

Index number:

050-003-00-9

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



environment

Hazardous to the aquatic environment chronic
Category 2

H411 Toxic to aquatic life with long lasting effects.



Acute oral toxicity Category 4

H302 Harmful if swallowed.

Acute inhalation toxicity Category 4

H332 Harmful if inhaled.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS07 GHS09

Signal word *Warning*

Hazard-determining components of labelling:

antimony potassium tartrate

Hazard statements

H302+H332 Harmful if swallowed or if inhaled.

Trade name: CA80TP Reagent RN, Component 3

(Contd. of page 1)

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P330 Rinse mouth.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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.

SECTION 3: Composition/Information on ingredients**3.1 Substances****CAS No. Description**

CAS: 28300-74-5 antimony potassium tartrate

Identification number(s)

EC number: 234-293-3

Index number: 050-003-00-9

SECTION 4: First aid measures**4.1 Description of first aid measures****General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

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: 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 No further relevant information available.**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** Wear protective clothing.

(Contd. on page 3)

Trade name: CA80TP Reagent RN, Component 3

(Contd. of page 2)

6.2 Environmental precautions:*Do not allow product to reach sewage system or any water course.**Inform respective authorities in case of seepage into water course or sewage system.**Do not allow to enter sewers/ surface or ground water.***6.3 Methods and material for containment and cleaning up:***Dispose contaminated material as waste according to section 13.**Ensure adequate ventilation.***6.4 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.***SECTION 7: Handling and storage****7.1 Precautions for safe handling***Thorough dedusting.**Ensure good ventilation/exhaustion at the workplace.***Information about fire - and explosion protection:** *No special measures required.***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:** 6.1 C**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:****CAS: 28300-74-5 antimony potassium tartrate**

WES (New Zealand)	Long-term value: 0.5 mg/m ³ as Sb
-------------------	---

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.**Wash hands before breaks and at the end of work.***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***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.**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.***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.*

(Contd. on page 4)

Trade name: CA80TP Reagent RN, Component 3

(Contd. of page 3)

Body protection: Protective work clothing

* SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Physical state	Solid
Colour:	White
Odour:	Unpleasant
Odour threshold:	Not determined.
Melting point/freezing point:	Undetermined.
Boiling point or initial boiling point and boiling range	Undetermined.
Flammability	Product is not flammable.
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	Not applicable.
Decomposition temperature:	Not determined.
pH	Not applicable.
Viscosity:	
Kinematic viscosity	Not applicable.
Dynamic:	Not applicable.
Solubility	
water at 20 °C:	59 g/l
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure:	Not applicable.
Density and/or relative density	
Density at 20 °C:	2.6 g/cm ³
Relative density	Not determined.
Vapour density	Not applicable.
Particle characteristics	Not determined.

9.2 Other information

Appearance:	
Form:	Powder
Important information on protection of health and environment, and on safety.	
Ignition temperature:	Not determined.
Explosive properties:	Product does not present an explosion hazard. Not determined.
Solids content:	100.0 %
Molecular weight	333.93 g/mol
Change in condition	
Evaporation rate	Not applicable.
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

(Contd. on page 5)

Trade name: CA80TP Reagent RN, Component 3

(Contd. of page 4)

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 *Harmful if swallowed or if inhaled.*

LD/LC50 values relevant for classification:

CAS: 28300-74-5 *antimony potassium tartrate*

Oral LD50 115 mg/kg (rat)

11.2 Information on other hazards

Endocrine disrupting properties

Substance is not listed.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

CAS: 28300-74-5 *antimony potassium tartrate*

EC50[48h] 5 mg/l (crustacean)

EC50[96h] 37 mg/l (fish)

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.*

12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

12.7 Other adverse effects

Remark: *Toxic for fish*

Additional ecological information:

General notes:

*Water hazard class 3 (German Regulation) (Assessment by list): extremely hazardous for water**Do not allow product to reach ground water, water course or sewage system, even in small quantities.**Danger to drinking water if even extremely small quantities leak into the ground.**Also poisonous for fish and plankton in water bodies.*

(Contd. on page 6)

Trade name: CA80TP Reagent RN, Component 3

(Contd. of page 5)

Toxic for aquatic organisms

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

IMDG, IATA

UN1551

14.2 UN proper shipping name

NZS

UN1551 ANTIMONY POTASSIUM TARTRATE
ANTIMONY POTASSIUM TARTRATE, MARINE
POLLUTANT

IMDG

Antimony potassium tartrate

IATA

14.3 Transport hazard class(es)

NZS



Class
Label

6.1 (T5) Toxic substances.
6.1

IMDG



Class
Label

6.1 Toxic substances.
6.1

IATA



Class
Label

6.1 Toxic substances.
6.1

14.4 Packing group

NZS, IMDG, IATA

III

14.5 Environmental hazards:

Product contains environmentally hazardous
substances: antimony potassium tartrate

Marine pollutant:

Yes

Special marking (NZS):

Symbol (fish and tree)

14.6 Special precautions for user

Symbol (fish and tree)

Hazard identification number (Kemler code):

Warning: Toxic substances.

EMS Number:

60

Stowage Category

F-A,S-A

A

(Contd. on page 7)

Trade name: CA80TP Reagent RN, Component 3

(Contd. of page 6)

14.7 Maritime transport in bulk according to IMO instruments *Not applicable.*

Transport/Additional information:

NZS

Limited quantities (LQ) 5 kg

Transport category 2

Tunnel restriction code E

IMDG

Limited quantities (LQ) 5 kg

Excepted quantities (EQ) Code: E1

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 1000 g

UN "Model Regulation": UN 1551 ANTIMONY POTASSIUM TARTRATE, 6.1, III, ENVIRONMENTALLY HAZARDOUS

* SECTION 15: Regulatory information

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

New Zealand Inventory of Chemicals

Substance is listed.

HSNO Approval numbers

Substance is not listed.

Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS07 GHS09

Signal word *Warning*

Hazard-determining components of labelling:

antimony potassium tartrate

Hazard statements

H302+H332 Harmful if swallowed or if inhaled.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P330 Rinse mouth.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Directive 2012/18/EU

Named dangerous substances - ANNEX I *Substance is not listed.*

Seveso category E2 *Hazardous to the Aquatic Environment*

Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t

Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t

National regulations:

Waterhazard class: *Water hazard class 3 (Assessment by list): extremely hazardous for water.*

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

(Contd. on page 8)

Trade name: CA80TP Reagent RN, Component 3

(Contd. of page 7)

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.

16.3 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

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

Acute oral toxicity Category 4: Acute toxicity – Category 4

Hazardous to the aquatic environment chronic Category 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

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

— NZ —