

according to Regulation (EC) No. 1907/2006

Revision Date 22.01.2018

Version 3.7

## aSECTION 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

Catalogue No. 114676

Product name CombiCheck 10 for checking the quality of photometric methods for

ammonium, chloride, CSB, nitrate, phosphorus and sulfate

Spectroquant®

R-1

REACH Registration Number This product is a mixture. REACH Registration Number see section 3.

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses Reagent for analysis

For additional information on uses please refer to the Merck Chemicals

portal (www.merckgroup.com).

## 1.3 Details of the supplier of the safety data sheet

Company Merck KGaA \* 64271 Darmstadt \* Germany \* Phone: +49 6151 72-0

Responsible Department LS-QHC \* e-mail: prodsafe@merckgroup.com

1.4 Emergency telephone

number

Please contact the regional company representation in your country.

## **SECTION 2. Hazards identification**

#### 2.1 Classification of the substance or mixture

This mixture is not classified as dangerous according to European Union legislation.

#### 2.2 Label elements

## Labelling.(REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

## 2.3 Other hazards

None known.

#### **SECTION 3. Composition/information on ingredients**

# according to Regulation (EC) No. 1907/2006

Catalogue No. 114676

Product name CombiCheck 10 for checking the quality of photometric methods for

ammonium, chloride, CSB, nitrate, phosphorus and sulfate Spectroquant®

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Chemical nature

3.1 Substance

Not applicable

Aqueous solution of inorganic and organic compounds.

3.2 Mixture

Remarks No disclosure requirement according to Regulation (EC) No.

1907/2006.

#### **SECTION 4. First aid measures**

## 4.1 Description of first aid measures

After inhalation: fresh air.

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower.

After eye contact: rinse out with plenty of water. Remove contact lenses.

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

# 4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

## 4.3 Indication of any immediate medical attention and special treatment needed

No information available.

#### **SECTION 5. Firefighting measures**

#### 5.1 Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

# 5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapours.

## 5.3 Advice for firefighters

## according to Regulation (EC) No. 1907/2006

Catalogue No. 114676

Product name CombiCheck 10 for checking the quality of photometric methods for

ammonium, chloride, CSB, nitrate, phosphorus and sulfate Spectroquant®

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Special protective equipment for firefighters

In the event of fire, wear self-contained breathing apparatus.

Further information

none

## SECTION 6. Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapours, aerosols. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders:

Protective equipment see section 8.

#### 6.2 Environmental precautions

No special precautionary measures necessary.

## 6.3 Methods and materials for containment and cleaning up

Observe possible material restrictions (see sections 7 and 10).

Take up with liquid-absorbent and neutralising material (e.g. Chemizorb® H⁺, Merck Art. No.

101595). Dispose of properly. Clean up affected area.

#### 6.4 Reference to other sections

Indications about waste treatment see section 13.

## SECTION 7. Handling and storage

## 7.1 Precautions for safe handling

Advice on safe handling

Observe label precautions.

Hygiene measures

Change contaminated clothing. Wash hands after working with substance.

## 7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed.

Recommended storage temperature see product label.

The data applies to the entire pack.

## 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

## SECTION 8. Exposure controls/personal protection

#### 8.1 Control parameters

## 8.2 Exposure controls

## according to Regulation (EC) No. 1907/2006

Catalogue No. 114676

Product name CombiCheck 10 for checking the quality of photometric methods for

ammonium, chloride, CSB, nitrate, phosphorus and sulfate Spectroquant®

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## **Engineering measures**

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

See section 7.1.

#### Individual protection measures

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Eye/face protection
Safety glasses

Hand protection

full contact:

Glove material: Nitrile rubber Glove thickness: 0,11 mm Break through time: > 480 min

splash contact:

Glove material: Nitrile rubber
Glove thickness: 0,11 mm
Break through time: > 480 min

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 741 Dermatril® L (full contact), KCL 741 Dermatril® L (splash contact).

This recommendation applies only to the product stated in the safety data sheet<(>,<)> supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Respiratory protection

Not required; except in case of aerosol formation.

## Environmental exposure controls

No special precautionary measures necessary.

#### SECTION 9. Physical and chemical properties

## 9.1 Information on basic physical and chemical properties

Form liquid

Colour colourless

Odour odourless

# according to Regulation (EC) No. 1907/2006

Catalogue No. 114676

Product name CombiCheck 10 for checking the quality of photometric methods for

ammonium, chloride, CSB, nitrate, phosphorus and sulfate Spectroquant®

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Odour Threshold Not applicable

pH ca. 5

at 20 °C

Melting point No information available.

Boiling point No information available.

Flash point No information available.

Evaporation rate No information available.

Flammability (solid, gas) No information available.

Lower explosion limit No information available.

Upper explosion limit No information available.

Vapour pressure No information available.

Relative vapour density No information available.

Density 0,998 g/cm3

at 20 °C

Relative density No information available.

Water solubility No information available.

Partition coefficient: n-

octanol/water

No information available.

Auto-ignition temperature No information available.

Decomposition temperature No information available.

Viscosity, dynamic No information available.

Explosive properties Not classified as explosive.

Oxidizing properties none

9.2 Other data

none

## SECTION 10. Stability and reactivity

10.1 Reactivity

# according to Regulation (EC) No. 1907/2006

Catalogue No. 114676

Product name CombiCheck 10 for checking the quality of photometric methods for

ammonium, chloride, CSB, nitrate, phosphorus and sulfate Spectroquant®

R-1

See section 10.3

#### 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

## 10.3 Possibility of hazardous reactions

Violent reactions possible with:

The generally known reaction partners of water.

#### 10.4 Conditions to avoid

no information available

# 10.5 Incompatible materials

no information available

## 10.6 Hazardous decomposition products

no information available

## **SECTION 11. Toxicological information**

# 11.1 Information on toxicological effects Mixture

Acute oral toxicity

This information is not available.

Acute inhalation toxicity

This information is not available.

Acute dermal toxicity

This information is not available.

Skin irritation

This information is not available.

Eye irritation

This information is not available.

Sensitisation

This information is not available.

Germ cell mutagenicity

This information is not available.

Carcinogenicity

This information is not available.

Reproductive toxicity

This information is not available.

**Teratogenicity** 

This information is not available.

Specific target organ toxicity - single exposure

This information is not available.

# according to Regulation (EC) No. 1907/2006

Catalogue No. 114676

Product name CombiCheck 10 for checking the quality of photometric methods for

ammonium, chloride, CSB, nitrate, phosphorus and sulfate Spectroquant®

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Specific target organ toxicity - repeated exposure

This information is not available.

Aspiration hazard

This information is not available.

#### 11.2 Further information

Hazardous properties cannot be excluded, but are relatively improbable due to the low concentration of the dissolved substance(s).

Handle in accordance with good industrial hygiene and safety practice.

## **SECTION 12. Ecological information**

#### **Mixture**

#### 12.1 Toxicity

No information available.

## 12.2 Persistence and degradability

No information available.

## 12.3 Bioaccumulative potential

No information available.

## 12.4 Mobility in soil

No information available.

#### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

## 12.6 Other adverse effects

Discharge into the environment must be avoided.

#### **SECTION 13. Disposal considerations**

Waste treatment methods

See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

## **SECTION 14. Transport information**

## Land transport (ADR/RID)

**14.1 - 14.6** Not classified as dangerous in the meaning of transport

regulations.

## Inland waterway transport (ADN)

Not relevant

Air transport (IATA)

according to Regulation (EC) No. 1907/2006

Catalogue No. 114676

Product name CombiCheck 10 for checking the quality of photometric methods for

ammonium, chloride, CSB, nitrate, phosphorus and sulfate Spectroquant®

R-1

**14.1 - 14.6** Not classified as dangerous in the meaning of transport

regulations.

Sea transport (IMDG)

**14.1 - 14.6** Not classified as dangerous in the meaning of transport

regulations.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant

THIS TRANSPORT DATA APPLIES TO THE ENTIRE PACK!

## **SECTION 15. Regulatory information**

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

EU regulations

Major Accident Hazard 96/82/EC

Legislation Directive 96/82/EC does not apply

SEVESO III Not applicable

Regulation (EC) No 1005/2009 on substances that not regulated

deplete the ozone layer

Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending

Directive 79/117/EEC

not regulated

Substances of very high concern (SVHC)

This product does not contain substances

of very high concern according to

Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of  $\geq$  0.1 % (w/w).

National legislation

Storage class 10 - 13 The data applies to the entire pack.

#### 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out.

## **SECTION 16. Other information**

#### Training advice

Provide adequate information, instruction and training for operators.

according to Regulation (EC) No. 1907/2006

Catalogue No. 114676

Product name CombiCheck 10 for checking the quality of photometric methods for

ammonium, chloride, CSB, nitrate, phosphorus and sulfate Spectroquant®

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## Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can be looked up at www.wikipedia.org.

# Regional representation

This information is given on the authorised Safety Data Sheet for your country.

The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of any properties of the product.



according to Regulation (EC) No. 1907/2006

Revision Date 22.01.2018

Version 3.7

## SECTION 1. Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

Catalogue No. 114676

Product name CombiCheck 10 for checking the quality of photometric methods for

ammonium, chloride, CSB, nitrate, phosphorus and sulfate

Spectroquant®

R-2

REACH Registration Number This product is a mixture. REACH Registration Number see section 3.

# 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses Reagent for analysis

For additional information on uses please refer to the Merck Chemicals

portal (www.merckgroup.com).

## 1.3 Details of the supplier of the safety data sheet

Company Merck KGaA \* 64271 Darmstadt \* Germany \* Phone:+49 6151 72-0

Responsible Department LS-QHC \* e-mail: prodsafe@merckgroup.com

1.4 Emergency telephone

number

Please contact the regional company representation in your country.

# **SECTION 2. Hazards identification**

#### 2.1 Classification of the substance or mixture

This mixture is not classified as dangerous according to European Union legislation.

## 2.2 Label elements

## Labelling.(REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

#### 2.3 Other hazards

None known.

## **SECTION 3. Composition/information on ingredients**

# according to Regulation (EC) No. 1907/2006

Catalogue No. 114676

Product name CombiCheck 10 for checking the quality of photometric methods for

ammonium, chloride, CSB, nitrate, phosphorus and sulfate Spectroquant®

R-2

Chemical nature

Aqueous solution of inorganic and organic compounds.

3.1 Substance

Not applicable

3.2 Mixture

Remarks No disclosure requirement according to Regulation (EC) No.

1907/2006.

#### **SECTION 4. First aid measures**

## 4.1 Description of first aid measures

After inhalation: fresh air.

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower.

After eye contact: rinse out with plenty of water. Remove contact lenses.

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

# 4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

## 4.3 Indication of any immediate medical attention and special treatment needed

No information available.

### **SECTION 5. Firefighting measures**

#### 5.1 Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

# 5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapours.

## 5.3 Advice for firefighters

# according to Regulation (EC) No. 1907/2006

Catalogue No. 114676

Product name CombiCheck 10 for checking the quality of photometric methods for

ammonium, chloride, CSB, nitrate, phosphorus and sulfate Spectroquant®

R-2

Special protective equipment for firefighters

In the event of fire, wear self-contained breathing apparatus.

Further information

none

## SECTION 6. Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapours, aerosols. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders:

Protective equipment see section 8.

## 6.2 Environmental precautions

No special precautionary measures necessary.

## 6.3 Methods and materials for containment and cleaning up

Observe possible material restrictions (see sections 7 and 10).

Take up with liquid-absorbent and neutralising material (e.g. Chemizorb® H\*, Merck Art. No.

101595). Dispose of properly. Clean up affected area.

#### 6.4 Reference to other sections

Indications about waste treatment see section 13.

## SECTION 7. Handling and storage

## 7.1 Precautions for safe handling

Advice on safe handling

Observe label precautions.

Hygiene measures

Change contaminated clothing. Wash hands after working with substance.

## 7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed.

Recommended storage temperature see product label.

The data applies to the entire pack.

## 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

## SECTION 8. Exposure controls/personal protection

#### 8.1 Control parameters

## 8.2 Exposure controls

## according to Regulation (EC) No. 1907/2006

Catalogue No. 114676

Product name CombiCheck 10 for checking the quality of photometric methods for

ammonium, chloride, CSB, nitrate, phosphorus and sulfate Spectroquant®

R-2

#### **Engineering measures**

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

See section 7.1.

#### Individual protection measures

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Eye/face protection
Safety glasses

Hand protection

full contact:

Glove material: Nitrile rubber Glove thickness: 0,11 mm Break through time: > 480 min

splash contact:

Glove material: Nitrile rubber Glove thickness: 0,11 mm Preak through time: > 480 min

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 741 Dermatril® L (full contact), KCL 741 Dermatril® L (splash contact).

This recommendation applies only to the product stated in the safety data sheet<(>,<)> supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Respiratory protection

Not required; except in case of aerosol formation.

## Environmental exposure controls

No special precautionary measures necessary.

#### SECTION 9. Physical and chemical properties

## 9.1 Information on basic physical and chemical properties

Form liquid

Colour colourless

Odour odourless

# according to Regulation (EC) No. 1907/2006

Catalogue No. 114676

Product name CombiCheck 10 for checking the quality of photometric methods for

ammonium, chloride, CSB, nitrate, phosphorus and sulfate Spectroquant®

R-2

Odour Threshold Not applicable

pH ca. 5

at 20 °C

Melting point No information available.

Boiling point No information available.

Flash point No information available.

Evaporation rate No information available.

Flammability (solid, gas) No information available.

Lower explosion limit No information available.

Upper explosion limit No information available.

Vapour pressure No information available.

Relative vapour density No information available.

Density 1,002 g/cm3

at 20 °C

Relative density No information available.

Water solubility No information available.

Partition coefficient: n-

octanol/water

No information available.

Auto-ignition temperature No information available.

Decomposition temperature No information available.

Viscosity, dynamic No information available.

Explosive properties Not classified as explosive.

Oxidizing properties none

## 9.2 Other data

none

## SECTION 10. Stability and reactivity

10.1 Reactivity

# according to Regulation (EC) No. 1907/2006

Catalogue No. 114676

Product name CombiCheck 10 for checking the quality of photometric methods for

ammonium, chloride, CSB, nitrate, phosphorus and sulfate Spectroquant®

R-2

See section 10.3

#### 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

## 10.3 Possibility of hazardous reactions

Violent reactions possible with:

The generally known reaction partners of water.

#### 10.4 Conditions to avoid

no information available

# 10.5 Incompatible materials

no information available

## 10.6 Hazardous decomposition products

no information available

## **SECTION 11. Toxicological information**

# 11.1 Information on toxicological effects Mixture

Acute oral toxicity

This information is not available.

Acute inhalation toxicity

This information is not available.

Acute dermal toxicity

This information is not available.

Skin irritation

This information is not available.

Eye irritation

This information is not available.

Sensitisation

This information is not available.

Germ cell mutagenicity

This information is not available.

Carcinogenicity

This information is not available.

Reproductive toxicity

This information is not available.

**Teratogenicity** 

This information is not available.

Specific target organ toxicity - single exposure

This information is not available.

# according to Regulation (EC) No. 1907/2006

Catalogue No. 114676

Product name CombiCheck 10 for checking the quality of photometric methods for

ammonium, chloride, CSB, nitrate, phosphorus and sulfate Spectroquant®

R-2

Specific target organ toxicity - repeated exposure

This information is not available.

Aspiration hazard

This information is not available.

#### 11.2 Further information

Hazardous properties cannot be excluded, but are relatively improbable due to the low concentration of the dissolved substance(s).

Handle in accordance with good industrial hygiene and safety practice.

## **SECTION 12. Ecological information**

#### **Mixture**

#### 12.1 Toxicity

No information available.

## 12.2 Persistence and degradability

No information available.

## 12.3 Bioaccumulative potential

No information available.

## 12.4 Mobility in soil

No information available.

#### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

## 12.6 Other adverse effects

Discharge into the environment must be avoided.

## **SECTION 13. Disposal considerations**

Waste treatment methods

See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

## **SECTION 14. Transport information**

## Land transport (ADR/RID)

**14.1 - 14.6** Not classified as dangerous in the meaning of transport

regulations.

## Inland waterway transport (ADN)

Not relevant

Air transport (IATA)

according to Regulation (EC) No. 1907/2006

Catalogue No. 114676

Product name CombiCheck 10 for checking the quality of photometric methods for

ammonium, chloride, CSB, nitrate, phosphorus and sulfate Spectroquant®

R-2

**14.1 - 14.6** Not classified as dangerous in the meaning of transport

regulations.

Sea transport (IMDG)

**14.1 - 14.6** Not classified as dangerous in the meaning of transport

regulations.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant

THIS TRANSPORT DATA APPLIES TO THE ENTIRE PACK!

## **SECTION 15. Regulatory information**

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

EU regulations

Major Accident Hazard 96/82/EC

Legislation Directive 96/82/EC does not apply

SEVESO III Not applicable

Regulation (EC) No 1005/2009 on substances that not regulated

deplete the ozone layer

Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending

Directive 79/117/EEC

not regulated

Substances of very high concern (SVHC)

This product does not contain substances

of very high concern according to

Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of  $\geq$  0.1 % (w/w).

National legislation

Storage class 10 - 13 The data applies to the entire pack.

## 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out.

## **SECTION 16. Other information**

#### Training advice

Provide adequate information, instruction and training for operators.

according to Regulation (EC) No. 1907/2006

Catalogue No. 114676

Product name CombiCheck 10 for checking the quality of photometric methods for

ammonium, chloride, CSB, nitrate, phosphorus and sulfate Spectroquant®

R-2

# Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can be looked up at www.wikipedia.org.

# Regional representation

This information is given on the authorised Safety Data Sheet for your country.

The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of any properties of the product.